









October 2013

North Dakota **Local Road Safety Program**



North Dakota Local Road Safety Program

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On behalf of

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23 USC 409 NDDOT Reserves All Objections

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Acronyms and Abbreviations

4Es education, enforcement, engineering, and emergency medical services

100MVMT 100 million vehicle miles traveled

AASHTO American Association of State Highway and Transportation Officials

ADT average daily traffic

CMC county major collector

CMF crash modification factor

CRS Crash Reporting System (North Dakota Department of Transportation)

DUI driving under the influence

EMS emergency medical services

ERA edge risk assessment

FHWA Federal Highway Administration

GDL graduated drivers license

GHSA Governors Highway Safety Association

HSIP Highway Safety Improvement Program

LEAD Listen, Educate, Ask, Discuss

LRSP Local Road Safety Program

MUTCD Manual on Uniform Traffic Control Devices

NCHRP National Cooperative Highway Research Program

NDDOT North Dakota Department of Transportation

NHTSA National Highway Traffic Safety Administration

Plan LRSP Safety Plan

PSA public service announcement SHSP Strategic Highway Safety Plan

TSO Traffic Safety Office



North Dakota Local Road Safety Program

Executive Summary

This Local Road Safety Program (LRSP) was prepared for the five counties (Cavalier, Nelson, Pembina, Ramsey, and Walsh) and the City of Devils Lake in the northeast region. The LRSP was prepared as part of North Dakota's statewide highway safety planning process. The contents are the result of a data-driven process, with a goal to reduce severe crashes (defined as those crashes resulting in at least one fatality or incapacitating injury) by documenting at-risk locations, identifying effective low-cost safety improvement strategies, and better positioning the northeast region to compete for available safety funds. The LRSP includes a description of the connection to safety planning efforts at the national, state (through North Dakota's *Strategic Highway Safety Plan* and the Highway Safety Improvement Program), and regional levels.

This LRSP was commissioned by the North Dakota Department of Transportation (NDDOT) to provide a tool to assist counties in submitting proactive low-cost systematic safety projects for the NDDOT to fund as part of the Highway Safety Improvement Program (HSIP). The LRSP is not intended to be a complete safety plan for the northeast region, because there may be other safety improvement strategies that are considered high-cost or low-cost that are also effective, but cannot be systematically applied across a county or local road system. While this LRSP addresses many of the safety concerns at high risk locations within the region, other equally important projects may be identified after this safety planning effort is complete.

Specifically, this LRSP includes the following:

- Description of the safety emphasis areas.
- Identification of a short list of high-priority, low-cost safety strategies.
- Documentation of at-risk locations along the county/local road systems that are considered
 candidates for safety investment. At-risk locations include roadway segments, horizontal
 curves, and intersections with multiple severe crashes or with roadway geometry and traffic
 characteristics similar to other locations in North Dakota where severe crashes have
 occurred.
- Development of approximately \$4 million of suggested safety projects across the northeast region (Table ES-1), including the filled out forms suitable for submittal to the NDDOT for their consideration for HSIP funding. These projects represent the application of high-priority safety strategies at the at-risk locations.
- Discussion of behavioral crash statistics, potential safety strategies, and current statewide resources available for implementation of behavioral safety strategies.

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TABLE ES-1
Northeast Region Total Safety Project Costs

Rural Projects	Roadway Segments	Intersections	Curves	Total
Cavalier County	\$28,145	\$55,300	\$43,500	\$126,945
Nelson County	\$31,440	\$38,100	\$16,900	\$86,440
Pembina County	\$83,525	\$261,800	\$91,237	\$436,562
Ramsey County	\$179,940	\$1,005,750	\$108,830	\$1,294,520
Walsh County	\$31,170	\$305,500	\$73,100	\$409,770
Urban Projects	Roadway Segments	Intersections – Right-Angle	Intersections – Pedestrians and Bicyclists	Total
Devils Lake	\$221,135	\$604,000	\$795,000	\$1,620,135

The information in this LRSP is consistent with best practices in safety planning as presented in guidance prepared by the Federal Highway Administration (FHWA), the American Association of State Highway and Transportation Officials (AASHTO), and the National Cooperative Highway Research Program (NCHRP). This information is provided to the northeast region in an effort to reduce the number of severe crashes on the county/local road systems. It is understood that the final decision to implement any of the suggested projects resides with the respective county or city officials.

It should also be noted that the rankings of county/local roadway facilities are based on a comparison with documented risk factors. There is no expectation or requirement that the northeast region pursue safety projects in the exact ranking order. The ranking suggests a general priority, and it is understood that actual project development decisions will be made by county or city staff based on consideration of economic, social, and political issues, as well as in coordination with other projects already in each agency's Capital Improvement Program.

It should also be noted that some of the at-risk locations and suggested safety projects involve the intersection of a county roadway and a state route. It is acknowledged that the county does not have the authority to implement projects on the state's right-of-way. The county is encouraged to coordinate with the NDDOT to pursue a partnership that identifies a path toward implementation. This LRSP (1) does **not** set requirements or mandates; (2) is **not** a standard; and (3) is neither intended to be nor does it establish a legal standard of care.

To help reduce the potential exposure to claims of negligence associated with motor vehicle crashes on the county/local road system, the following key point should be considered:

• Federal law (23 USC Section 409) established that information generated as part of the statewide safety planning process is considered privileged and unavailable to the public. The privileged status includes crash data where value/detail has been added by analysts during the safety planning process (for example, computation of crash rates, disaggregation of crashes by type or severity, and documentation of contributing factors), the lists of at-risk locations, and information supporting the development and evaluation of potential safety projects. The federal law and the privileged status of the safety information was upheld by

the U.S. Supreme Court in the case of Pierce County (Washington) v. Guillen (see Appendix I). North Dakota interprets Section 409 to mean that basic crash data is available to the public on request, but that it cannot be used in legal proceedings associated with claims of negligence.

Regarding the expected life of this LRSP, the shelf life of this document is limited (as with any transportation plan). This is because the distribution of crashes can change over time, just as roadway and traffic conditions change, contributing to the occurrence of crashes. This LRSP contains \$4 million of potential safety projects, which could provide the northeast with a sufficient backlog of projects for up to 5 years. As a result, the counties and the City of Devils Lake are encouraged to consider periodically updating this LRSP.

The counties and the City of Devils Lake are encouraged to apply for these projects through the NDDOT's HSIP process. The anticipated annual HSIP process is shown in Table ES-2.

TABLE ES-2 HSIP Solicitation Schedule

Month	Task Description
October/November	Solicitation for HSIP is sent out to all counties, districts, MPOs, cities, and tribes. The counties, districts, MPOs, cities, and tribes will have about 6 weeks to respond .
January through March	NDDOT reviews the requests and conducts additional studies if required.
Following Fall	HSIP approval notices are sent after program concurrence from FHWA. Funding for an approved project will be provided as funding is available.

North Dakota Local Road Safety Program

1.0 Introduction

1.1 Background

To fulfill a commitment in the 2013 North Dakota Strategic Highway Safety Plan (SHSP), the North Dakota Department of Transportation (NDDOT) began the Local Road Safety Program (LRSP). The purpose of the LRSP is to better engage local roadway agencies in the statewide safety planning process. The NDDOT's commitment is based on two pieces of information:

- Based on 2007-to-2011 crash records, the SHSP identified that 56 percent of severe crashes (those crashes resulting in at least one fatality or serious injury) in North Dakota occurred on roads operated by local agencies.
- The NDDOT had historically focused federal safety funds on interstates, U.S. highways, and state highways, even though approximately half of severe crashes occurred on those facilities.

The NDDOT set out to increase the level of participation of local agencies in safety planning and the amount of safety funds directed toward projects on local systems. To do this, the NDDOT first partnered with local agencies (including all 53 counties and 12 major cities in the state) to prepare safety plans for every region of North Dakota.

Representatives from the NDDOT; Cavalier, Nelson, Pembina, Ramsey, and Walsh counties; and the City of Devils Lake prepared this LRSP Safety Plan (Plan) as Phase 1 of a comprehensive effort to reduce The Strategic Highway Safety Plan (SHSP) development process was key in helping us identify the importance of local roads to achieve our long-term safety goals. This data-driven process helped us to transition to a systemic identification of crash types on all roads in addition to our traditional crash location (or hot spot) approach on the state system. As a result, the NDDOT has partnered with local stakeholder to prepare road safety plans that will identify potential safety projects consistent with the SHSP.

— Grant Levi, P.E., Director
 North Dakota Department of Transportation

the number of fatal and incapacitating injury crashes (referred collectively as severe crashes) that occur on North Dakota's local road system in the northeast region. The area covered by the Plan includes portions of NDDOT District 3 – Devils Lake and District 6 – Grand Forks (Figure 1-1). Additionally, Burleigh and Ward counties and the cities of Bismarck and Minot participated in Phase 1 of the study; however, their information is presented in separate reports.

The purpose of this LRSP is to identify and implement specific safety strategies at specific locations and to link these projects directly with the contributing factors associated with the majority of severe crashes on the local roads. These safety projects are intended to be comprehensive by addressing both infrastructure- and driver-behavior-related crashes by including proactive projects developed through a system-wide risk assessment process. These projects are intended to compliment reactive projects developed through a site analysis approach focused on high-crash locations.

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The traffic safety priorities identified in this Plan are the result of a data-driven analysis of nearly 88,450 crashes (including 2,231 severe crashes) on all roads in North Dakota. Of these crashes, 4,900 total crashes and 125 severe crashes occurred in the northeast region of the state over the 5-year period from 2008 to 2012.

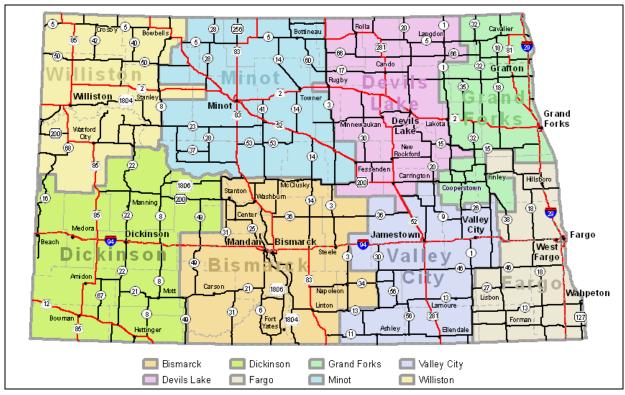


FIGURE 1-1
North Dakota Department of Transportation's Eight Districts

1.2 Traffic Safety – A National Perspective

According to the National Highway Traffic Safety Administration (NHTSA), 32,310 people were killed in traffic crashes in 2011 – an average of 89 people killed every day – and an additional 2.2 million people were injured. The number of fatalities nationally decreased significantly and steadily in the 1970s and 1980s. This trend was interrupted beginning in the early 1990s and continuing through the early 2000s as traffic fatalities began to increase. However, since 2005, traffic fatalities have decreased dramatically to the lowest number of fatalities in recent history – 32,310 fatalities in 2011.

Like the national trend, the North Dakota traffic fatality rate also decreased in the 1970s and 1980s. Likewise, North Dakota's traffic fatalities slowly increased through the 1990s and began to decrease again in 2005. However, unlike the national trend, North Dakota's traffic fatality rate has increased since 2008. The 2013 North Dakota Strategic Highway Safety Plan recognizes the following issues likely account for much of the increase:

- Shifts in the age of the driving population.
- Steady increase in the number of vehicle miles traveled in North Dakota, which is counter to the flat or decreasing national trend in travel.

- Other states have a longer history using a systemic investment approach to focus on locations with risk factors for severe crashes.
- The growing challenges of providing emergency medical response and quick access to advanced health care in rural areas.

1.2.1 AASHTO's Strategic Highway Safety Plan and Safety Emphasis Areas

In the late 1990s, the American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA) supported a comprehensive and data-driven approach to reduce the number of traffic-related fatalities. Both AASHTO and FHWA concluded that up to that point, states' efforts had not been effective in lowering the number of severe crashes because: (1) efforts were not focused on severe crashes nor the primary factors resulting in severe crashes; and (2) safety project selection was not part of a data-driven process that implemented effective strategies at locations most at risk for a severe crash.

AASHTO and FHWA recommended a safety program development process that included 22 categories (or safety emphasis areas) in the areas of drivers, special users, vehicles, highways, emergency services, and management. The objective of this first step is to help agencies consider the 4Es of safety—education, enforcement, engineering, and emergency medical services (EMS)—when identifying safety priorities for their roads. In addition, selecting safety emphasis areas focuses agencies on safety strategies linked to the issue.

In 2007, AASHTO set a goal to reduce the number of traffic fatalities nationally by 1,000 each year for the next 20 years, which is an integral first step in a national *Toward Zero Deaths* safety vision. FHWA has determined that this goal will be reached only by partnering with individual states. This partnering will lead to more successful project implementation and will result in programs that target the factors contributing to the greatest number of fatal and serious injury crashes.

1.3 North Dakota's Statewide Safety Planning Efforts

As shown in Figure 1-2, through 2004, North Dakota had a fatality rate (1.34 fatalities per 100 million vehicle miles traveled [100MVMT] in 2004) that was less than the national average (1.44 fatalities per 100MVMT). However, in recent years, the North Dakota fatality rate (1.61 fatalities per 100MVMT in 2011) has risen to above the national average (1.10 fatalities per 100MVMT) and the overall number of traffic fatalities has crept upward (see Figure 1-2). In 2011, there were 148 fatalities on North Dakota roads: the most traffic fatalities reported in the state since 1982.

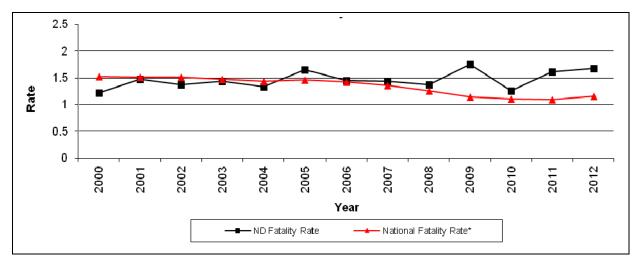


FIGURE 1-2 Fatality Rate – National and North Dakota (2000 to 2012)

In 2013, the NDDOT updated the state's SHSP. Based on severe crashes (Table 1-1), the 2013 SHSP identified the following safety emphasis areas, as well as priority safety strategies in each area:

- Young drivers (under age 21)
- Excessive speed or aggressive driving
- Alcohol-related
- Unbelted vehicle occupants
- Lane departure
- Intersections

North Dakota also adopted a long-term vision of zero fatalities on its roadways. Achieving this vision will require many years and dramatic shifts in the safety culture for North Dakota residents. An aggressive intermediate goal was set to reduce the 3-year average of traffic fatalities to 100 or fewer by 2020.

TABLE 1-1 North Dakota Fatal and Serious Injury Crashes by AASHTO Safety Emphasis Area

		Statewide Crashes (All Roads)	
Safety Emphasis Area		Percent	Number
	Involving Driver under Age 21	22%	501
	Involving drivers over the age of 64	13%	280
Drivers	Excessive Speed or Aggressive Driving	26%	576
Drivers	Alcohol-Related	30%	667
	Distracted, asleep, or fatigued drivers	9%	206
	Unbelted Vehicle Occupants	48%	1,067

TABLE 1-1
North Dakota Fatal and Serious Injury Crashes by AASHTO Safety Emphasis Area

		Statewide Crashes (All Roads)		
	Safety Emphasis Area	Percent	Number	
Special Hears	Pedestrians crashes	5%	117	
Special Users	Bicycle crashes	2%	46	
Vehicles	Motorcycles crashes	12%	265	
venicles	Heavy vehicle crashes	15%	342	
	Train-vehicle collisions	1%	13	
Highways	Lane-Departure Including both lane-departure (898 severe crashes) and head-on/ sideswipe-opposing crashes (150 severe crashes)	47%	1,048	
	Intersections	23%	513	
	Work zone crashes	2%	36	
Total Severe (Fatal and Incapacitating Injury) Crashes			2,231	

Notes:

Information is from the 2008 to 2012 North Dakota crash data records, which is an update to the information in the 2013 North Dakota SHSP that used 2007 to 2011 crash records.

Numbers in this table do not add up to the statewide crash numbers because one crash may be categorized into multiple emphasis areas. For example, one crash may involve a young driver at an intersection and, therefore, be included in both of these emphasis areas.

1.4 Local Road Safety Program Overview

North Dakota's local road system encompasses more than 97,500 miles of roadway out of approximately 106,000 miles statewide. Although, historically, more than 50 percent of severe crashes in North Dakota occurred on local roads, the density of these crashes was very low (approximately 0.002 severe crash per mile per year). As a result, local agencies were unable to identify high-crash locations to nominate for funding through the Highway Safety Improvement Program (HSIP). Therefore, using stand-in data for the severe crashes, safety projects were identified using a systemic process to evaluate at-risk locations. The use of the systemic process was necessary due to the low crash density. Based on revised FHWA policy, the NDDOT expanded the HSIP to include projects identified through the systemic analysis of local roads.

The focus areas of the systemic risk assessment are rural, paved county and tribal highways, and urban arterials and collectors in North Dakota's larger cities (cities with a population greater than 5,000). Paved, rural county highways were selected based on an analysis of statewide crash data that indicated that approximately 61 percent of severe local road crashes occurred on rural county roads. Of these crashes, approximately half occurred on paved roads, which accounted for less than 10 percent of county roads (approximately 6,200 miles). Further analysis indicated that on these rural highways, the most at-risk elements included roadway

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¹ Does not include all paved roads outside municipal limits, but focuses on routes that serve regional travel. For example, a loop road that is paved and yet only provides access to a residential neighborhood was considered to be a local road given the type of traffic served by the facility.

segments (60 percent of severe crashes), horizontal curves (32 percent of severe crashes), and intersections (32 percent of severe crashes).

Major cities were selected as a focus because approximately 90 percent of the severe local-road crashes occurred within the city boundaries of the 12 cities in this category. Furthermore, 40 percent of the severe crashes occurred on urban arterials and collectors. In addition, because these 12 cities are responsible for operation and maintenance of U.S. highway and state highway routes within the municipal limits (not including fully access-managed facilities, such as freeways), the U.S. and state highways were included in the review.

Figure 1-3 shows the approach used to develop this Plan for the northeast counties. Beginning with the crash analysis and concluding with this LRSP Plan report, the process is a culmination of the NDDOT and concerned local agencies working together for nearly half a year.



FIGURE 1-3 Local Road Safety Program Safety Plan Approach

North Dakota Local Road Safety Program

2.0 Northeast Region Safety Emphasis Areas and Crash Overview

The first step in the process to prepare Safety Plans for the five counties and the City of Devils Lake in the northeast region was to conduct a crash analysis overview statewide for North Dakota and then for the northeast region as a whole.

2.1 Northeast Region Crash Overview

2.1.1 North Dakota Crash Mapping

Crash data were taken from NDDOT's Crash Reporting System (CRS) and placed into ArcGIS for data exportation based on specific locations relative to local roads. The most recent 5 years of crash data (from 2008 to 2012) were analyzed and used to determine risk factors specific to the northeast region local roads. Consistent with NDDOT's SHSP, the analysis focused on severe (fatal and incapacitating injury) crashes.

2.1.2 Facilities Analyzed

The crash analysis was broken into three main facility types: roadway segments, curves, and intersections.

- Paved rural local roadway segments were analyzed and local county major collector (CMC) gravel roads were analyzed for multiple crash locations. Other local gravel roads were removed from the analysis because of the relatively low percentage of severe crashes and due to the lack of infrastructure-based strategies that can be applied to this road type.
- Local rural road intersections with state highways or other local roads were included in the
 analysis. Local non-CMC gravel roads intersecting with other local roads were removed
 from the analysis due to the very low number of crashes at these intersections.
- Horizontal curves on paved rural local roads were included in analysis.
- Urban segments and intersections were analyzed in the City of Devils Lake. Urban roadway types analyzed within the city limits included:
 - State routes
 - Urban principal arterials
 - Urban minor arterials
 - Urban collector roads
- All other local road segments and intersections, including gravel roads, were reviewed for locations with multiple severe crashes or "hot spots."

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2.1.3 Crash Data Sets

Crash data for the 5 years from 2008 to 2012 were used for the northeast region crash analysis. In safety analysis, it is recommended that more than 1 year of data be studied to reduce the possibility of examining an unusual year. It is also important to include as many years as necessary to produce a data set that will provide statistically reliable results, but not too long so that changed conditions are a concern (for example, reconstructed roads, addition of STOP signs, and changed speed limits). For the northeast region, no single county had enough crashes to be statistically reliable; therefore, decisions were based on the crashes for the five counties combined (Figure 2-1), statewide data (Figure 2-2), or national research.

The northeast data set includes 2,508 crashes on local roads; of these, 74 were fatal or serious injury crashes. Disaggregating the severe crashes by road type (paved, gravel, or local), area (urban versus rural), and crash type category (intersection versus segment crashes) resulted in the distribution shown in Table 2-1, Figure 2-1, and Figure 2-2.

TABLE 2-1
Crash Distribution (2008 to 2012)

Location	Northeast (Percent/Number)	Statewide (Percent/Number)	
Rural Roads	65%	61%	
	(48 crashes)	(740 crashes)	
Paved Rural Roads	29%	52%	
Taveu Kulai Koaus	(14 crashes)	(387 crashes)	
Local Craval CMC Books	17%	9%	
Local Gravel CMC Roads	(8 crashes)	(68 crashes)	
Davied Divisi David Comments	64%	60%	
Paved Rural Road Segments	(9 crashes)	(226 crashes)	
Single Vehicle, Lane-Departure Crashes on Paved Rural Road	100%	76%	
Segments	(9 crashes)	(171 crashes)	
David Dural Dood Intersections	21%	32%	
Paved Rural Road Intersections	(3 crashes)	(120 crashes)	
Devel Devel Dead They CTOD Intersections	67%	42%	
Paved Rural Road Thru-STOP Intersections	(2 crashes)	(50 crashes)	

This review shows that, on the local system, severe lane-departure crashes on paved roads and at angle crashes at Thru-STOP intersections are overrepresented. Based on statewide traffic safety data, severe lane-departure crashes in curves are also overrepresented.

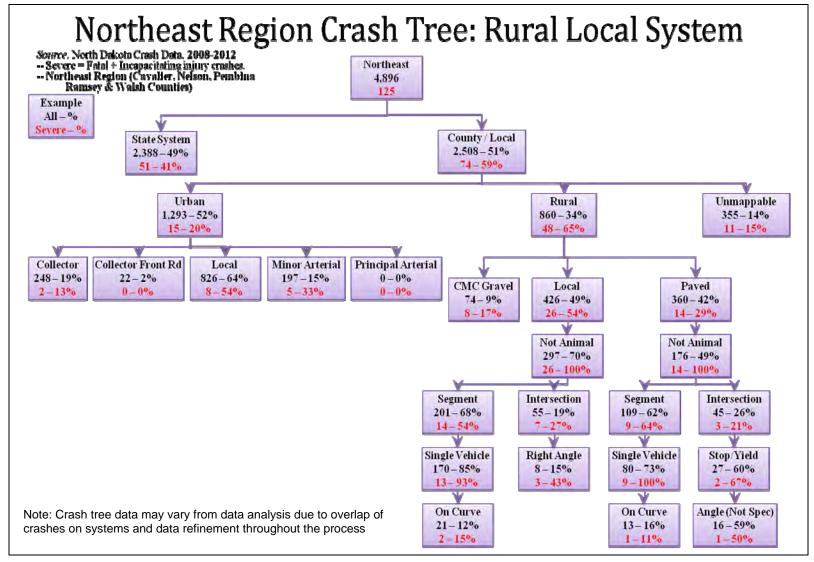


FIGURE 2-1
Northeast Region Crash Data Overview – Rural and Urban Local Road Systems (2008 to 2012)

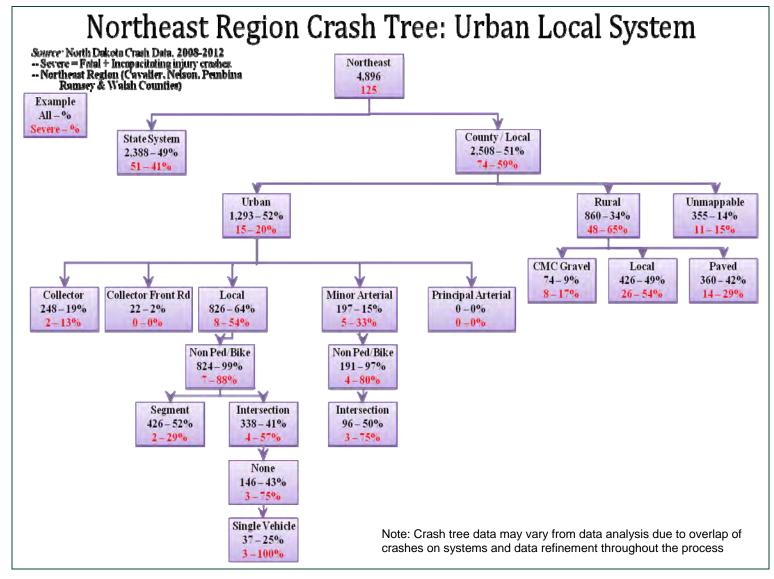


FIGURE 2-1 (Continued)

Northeast Region Crash Data Overview – Rural and Urban Local Road Systems (2008 to 2012)

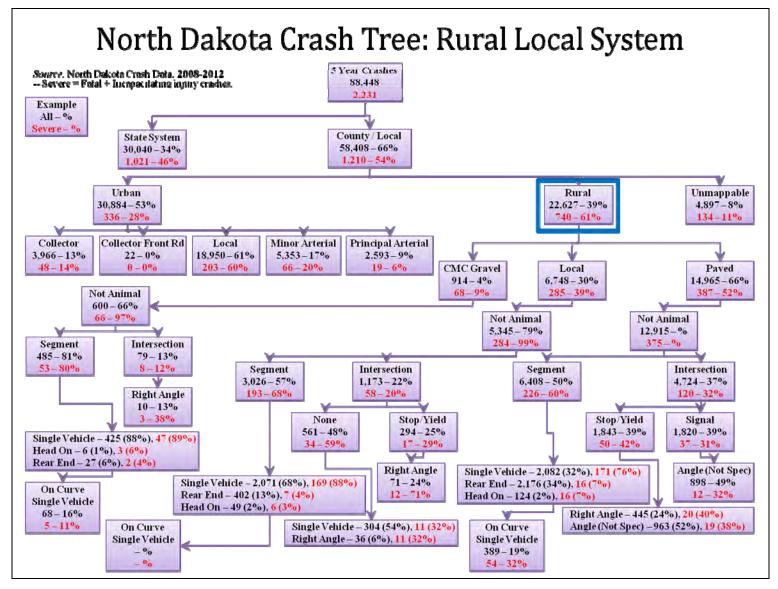


FIGURE 2-2 North Dakota Crash Data Overview – Rural and Urban Local Road Systems (2008 to 2012)

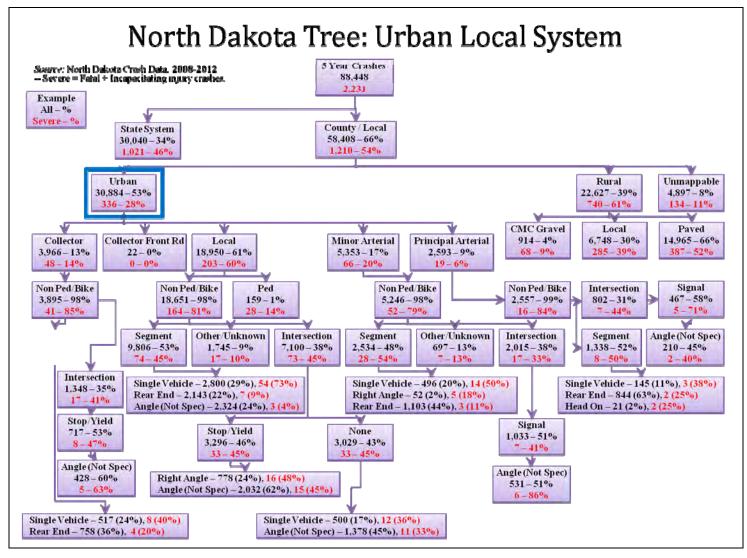


FIGURE 2-2 (Continued)

North Dakota Crash Data Overview - Rural and Urban Local Road Systems (2008 to 2012)

2.2 Northeast Region Safety Emphasis Areas

The total number of severe crashes (those crashes resulting in a fatality or serious injury) in each county over 5 years from 2008 to 2012 was so few that the crash data was analyzed at regional, statewide, and national levels for various risk factors.

Section 1.2 described the development of AASHTO's emphasis areas, and how this process was applied to the State of North Dakota to identify statewide safety emphasis areas (Table 1-1). An identical process was followed for North Dakota's northeast counties, resulting in the distribution of severe crashes among AASHTO's 22 emphasis areas (Table 2-2). The safety emphasis areas for the northeast region are consistent with the state's emphasis areas. This process revealed where crashes were overrepresented based on a comparison to statewide averages or where a large enough number of crashes represented an opportunity to substantially reduce crashes. As a result, the following safety emphasis areas were identified as priorities for safety investments:

- Driver Behavior Young drivers, aggressive drivers, alcohol-related, and unbelted vehicle occupants
- Highways Lane-departure and intersection crashes

TABLE 2-2
Northeast Region Severe Crashes by Safety Emphasis Areas (2008 to 2012)

	Statewide	2008 to 2012 Severe Crashes					
		Northeast Region*		State Roads		Local System	
Safety Emphasis Areas	(% of Total)	%	#	%	#	%	#
Total Severe Crashes	2,231	125		51		74	
Involving Drivers Under Age 21	22%	22%	28	24%	12	22%	16
Involving Drivers Over Age 64	13%	13%	16	18%	9	9%	7
Excessive Speed or Aggressive Driving	26%	30%	37	18%	9	38%	28
Alcohol-Related	30%	37%	46	22%	11	47%	35
Distracted, Asleep, or Fatigued Drivers	9%	15%	19	18%	9	14%	10
Unbelted Vehicle Occupants	48%	50%	63	43%	22	55%	41
Pedestrian Crashes	5%	3%	4	2%	1	4%	3
Bicycle Crashes	2%	2%	3	2%	1	3%	2
Motorcycle Crashes	12%	14%	18	12%	6	16%	12
Heavy Vehicle Crashes	15%	14%	18	25%	13	7%	5
Train-Vehicle Collisions	1%	1%	1	0%	0	1%	1
Lane-Departure (Run-Off-the-Road and Head-On) Crashes	47%	52%	65	49%	25	54%	40
Head-On	7%	6%	8	12%	6	3%	2
Run-off-the-Road Crashes	40%	46%	57	37%	19	51%	38
Intersection Crashes	23%	27%	34	16%	8	35%	26
Work Zone Crashes	2%	2%	2	2%	1	1%	1

TABLE 2-2
Northeast Region Severe Crashes by Safety Emphasis Areas (2008 to 2012)

	Statewide	2008 to 2012 Severe Crashes						
		Northeast Region*		State Roads		Local System		
Safety Emphasis Areas	(% of Total)	%	#	%	#	%	#	
Deer Collisions	1%	0%	0	0%	0	0%	0	
Adverse (Winter) Weather Related	17%	13%	16	18%	9	9%	7	

Note:

Severe crashes are those crashes that result in at least one fatality or incapacitating injury.

Strategies to reduce crashes depend on whether a safety emphasis area is infrastructure-based or driver-behavior-based. Infrastructure-based emphasis areas refer to characteristics of the location (for example, a roadway segment, curve, or intersection) where crashes occurred. Driver-behavior-based emphasis areas refer to motorist characteristics or actions that contribute to crashes. Because driver behavior is tied to laws made at the national and state levels, roadway agencies generally have less ability to address driver-behavior-based emphasis areas. The most effective approach for road authorities to addressing driver-behavior-based emphasis areas is to focus on public education and law enforcement through cooperation and collaboration with other county departments, agencies, and schools. Generally, more opportunities exist for county and city road authorities to address infrastructure-based emphasis areas, because many of the associated strategies can be implemented as separate roadway improvement projects, or along with other planned improvements. Specific infrastructure- and driver-behavior-based strategies presented to the participants of safety workshops held for the northeast counties are provided in Section 3.2.

2.3 Northeast Crash Risk Factors

The objective of the analytical process is to identify candidates for safety investment based on two criteria – high-crash locations and at-risk locations. A more detailed crash analysis was performed for each priority crash type to identify (1) locations where these priority crash types occur at a rate of one or more severe crashes per year, and (2) basic roadway and traffic characteristics of locations with severe crashes. These characteristics are not considered to be the cause of crashes, but instead are used to determine the risk that a future severe crash would occur at a particular location. Information from historic crashes was used to evaluate the remainder of the northeast region's local road system and prioritize locations for safety investment based on similar characteristics.

Three urban areas were studied as a part of Phase I in the LRSP in addition to the seven northeast region counties: Bismarck, Minot, and Devils Lake. Devils Lake is the subject of the urban portion of this Plan, but for analysis purposes, the data were combined for all of Phase I urban areas.

^{*} Cavalier, Nelson, Pembina, Ramsey, and Walsh Counties

2.3.1 Rural Segments - Crashes on Paved Roads

Of the more than 97,500 miles of local road system in North Dakota, only 7 percent of the roads are paved. However, 52 percent of crashes occured on paved roads. Therefore, the focus of the LRSP is on rural paved roadway segments.

There are 655 miles of rural paved roads in the northeast region. From 2008 to 2012, 13 severe crashes were reported on these roads. The predominant crash type on these roads was lane-departure (involving a single vehicle; Figure 2-3). The following five risk factors were identified for rural lane departure crashes on paved roads in the northeast region:

- 1. **Average Daily Traffic (ADT)** -Of the northeast rural paved roads, 64 percent have an ADT between 150 and 500 vehicles per day. However, 92 percent of the severe crashes and 91 percent of the severe lane-departure crashes occurred within this ADT range (Figure 2-4). Therefore, any segment with an ADT between 150 and 500 vehicles per day received a star.¹
- 2. **Access Density -** Nationally, research has shown that an access density of eight or more access points per mile (including field entrances, commercial entrances, roadway access, etc.) increased the likelihood of a severe crash occurring. While the northeast data set was too small to determine a range for the access density risk, the national data were used. Any segment with an access density greater than eight access points per mile received a star.
- 3. **Lane-Departure Density -** The average lane-departure density for the northeast region was 0.032 crash per mile per year. Due to limited number of crashes in each county, any roadway segment where the lane-departure density was greater than the average for the northeast region received a star.
- 4. **Critical-Radius Curve Density -** Nationally, lane-departure crashes frequently occur within curves. Curves with radii between 500 and 1,200 feet [that is, critical-radius curves] have a higher severe-crash rate than other curve radii, and roadway segments with more curves in this range are considered to have greater risk. The risk factor is determined by the number of critical-radius curves divided by the length of the segment. The northeast region's average critical-radius curve density for these types of curves along roadway segments was 0.084 curve per mile. Any segment with a critical-radius curve density greater than 0.084 received a star.
- 5. **Edge Risk Assessment (ERA)** A rating system was developed to categorize the risk level of vehicles leaving the travel lane. Roads with a usable shoulder and reasonable clear zone received a rating of 1. Roads with little or no usable shoulder but with a reasonable clear zone received a rating of 2, as did roads with a usable shoulder but with fixed objects in the clear zone. Roads with no usable shoulder and fixed objects in the clear zone received a rating of 3. Examples of these edge risks are shown in Figure 2-5. Roads were evaluated using photos taken in the summer of 2013 to determine the rating. Roads with a rating of 2 or 3 received a star.

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¹ When a risk factor is present, the segment, curve or intersection is given a star. The more risk factors present (that is, more stars) indicates greater potential for a severe crash to occur.

Detailed segment analysis and results for the five northeast region counties is provided in Chapter 4. A prioritization process for each roadway segment was put into place using the five risk factors by giving stars to each risk factor present. The highest-priority roadway segments received the most stars. In cases where roadway segments received the same number of stars, the ERA and ADT were used to break the tie.

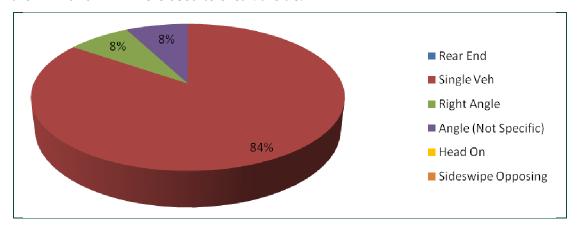


FIGURE 2-3

Northeast Region Severe Crash Types on Rural Paved Roads (2008 to 2012)

NOTE: The percentage of rear-end, head-on, and sideswipe-opposing crashes was zero.

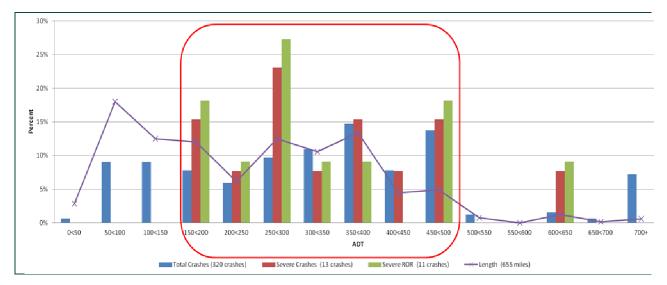
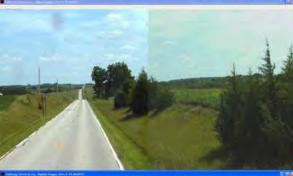


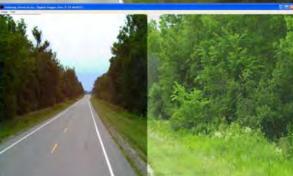
FIGURE 2-4
Northeast Region Rural Roadway Segment Average Daily Traffic (ADT) Crash Data (2008 to 2012)



1 – Usable Shoulder, Reasonable Clear Zone



2 – No Usable Shoulder, Reasonable Clear Zone



2 – Usable Shoulder, Roadside with Fixed Obstacles



3 – No Usable Shoulder, Roadside with Fixed Obstacles

FIGURE 2-5 Sample Edge Risk Assessment Ratings and Descriptions

2.3.2 Rural Curves – Crashes on Paved Roads in Curves

Detailed crash analysis included horizontal curves on rural paved local roads. Research indicates horizontal curves with certain characteristics contribute to the overall frequency of lane-departure crashes. The 654 miles of rural paved roads in the northeast region contain 112 curves totaling almost 16 miles in length (2 percent of the road system mileage).

With only two severe crashes reported from 2008 to 2012, too few crashes occurred on these curves to serve as a reliable indicator of the relative degree of risk. However, statewide data show the importance of safety improvements on curves to reduce severe crashes since 32 percent of severe lane-departure crashes occur in curves. As a result, the LRSP team used characteristics of curves in the northeast region where crashes had occurred, as well as available information from similar analysis across the nation and statewide data. Results from *Cost-Benefit Analysis of In-Vehicle Technologies and Infrastructure Changes to Avoid Crashes Along Curves and Shoulders* (compiled by the University of Minnesota and CH2M HILL in June 2009) were also used in curve analysis and prioritization.

Based on a review of these sources, the following five risk factors were identified for crashes within curves in the northeast region:

1. **Curve Radius -** In the northeast region, curves with mid-range radii had higher crash densities (Figure 2-6), similar to the national data. An upper limit of 1,200 feet was used for at-risk curves, because 1,200 feet is a 60-mile-per-hour design speed based on AASHTO's *A Policy on Geometric Design of Highways and Streets* (commonly referred to as the "Green Book;" 6th edition, 2011). A lower limit of 500 feet was used to represent the severe lane-departure crashes that were reported in the northeast region from 2008 to 2012. Any curve with a radius between 500 and 1,200 feet received a star.

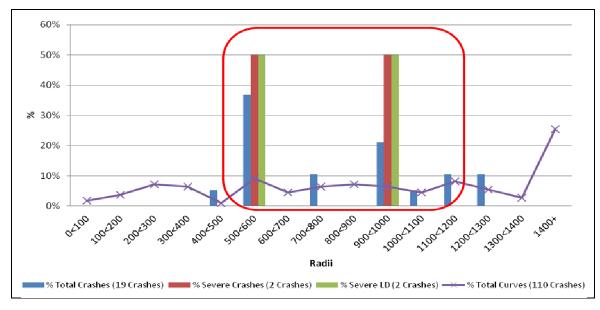


FIGURE 2-6
Northeast Region Curve Crashes by Radii – 500 to 1,200 feet (2008 to 2012)

2. **Average Daily Traffic (ADT) –** Traffic volumes between 350 and 650 vehicles per day present a risk factor in the northeast region and represent a higher risk for crashes (Figure 2-7). Sixty-eight percent of crashes occurred in curves with this ADT, while only 28 percent of curves are represented in this range. Therefore, curves with an ADT between 350 and 650 vehicles per day received a star.

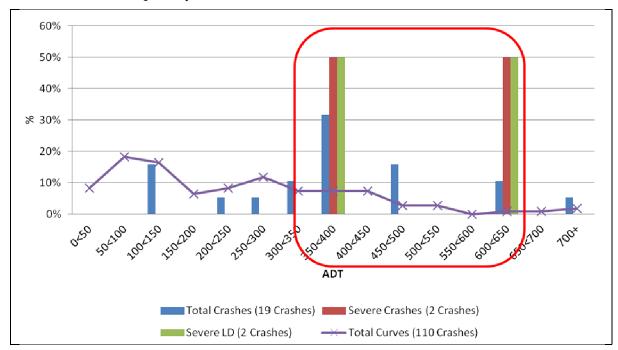


FIGURE 2-7
Northeast Region Curve Crashes by Average Daily Traffic (ADT) – 350 to 650 Vehicles per Day (2008 to 2012)

- 3. **Intersection in the Curve –** In the northeast region, the presence of an intersection within a curve increased the risk for a severe crash (Figure 2-8). Curves with at least one intersection within the curve received a star.
- 4. **Visual Trap -** A visual trap exists when the crest of a vertical curve is located before a horizontal curve or where a minor road, tree line, or line of utility poles continues on a tangent to the curve, thereby creating the illusion that the road continues straight ahead (Figure 2-9). The presence of a visual trap increased the risk of crashes in the northeast region (Figure 2-8) and, therefore, received a star.
- 5. **Severe Crashes –** If a severe crash occurred on a curve between 2008 and 2012, the curve received a star.

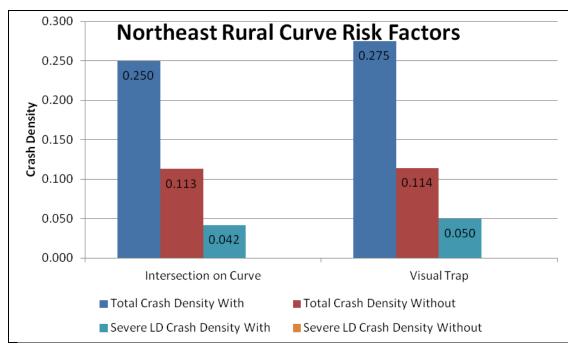


FIGURE 2-8
Rural Curve Risk Factors for the Northeast Region
NOTE: The severe lane-departure (LD) crash density without risk factor present was zero.



FIGURE 2-9
Example of a Visual Trap – Minor Road Intersects Roadway on a Curve

Based on 19 total crashes and 2 severe lane-departure crashes in the northeast region, curves with intersections and visual traps have a higher crash density (are more at risk) than those without such features. These risk factors have also been observed nationally.

Detailed curve analysis and results for the five northeast region counties is provided in Chapter 4. The five risk factors were used to prioritize curves in the northeast region, with the highest-priority curves receiving the most stars. Curves were reviewed for proximity to high-priority curves and existing conditions as well.

Curves in the northeast region were screened for compliance with the *Manual on Uniform Traffic Control Devices* (MUTCD; 2009) requirement regarding traffic signs at horizontal curves. Under

this requirement, a curve must have an advance horizontal alignment warning sign if the daily traffic is greater than 1,000 vehicles per day and if speed differentials (the difference between the speed limit and the advisory speed) meet certain thresholds. A horizontal alignment sign and advisory speed plaque are recommended when the speed differential is 5 mph, and they are required if the speed differential is 10 mph or greater. Curve radius was used to estimate whether individual curves meet the speed differential requirements for advance warning signs and advisory speed plaques. The estimated advisory speeds (assuming a 55-mph speed limit, 6-percent superelevation, and a friction factor consistent with the AASHTO Green Book) based on the curve radius are as follows:

- 900 to 1,100 feet 50 mph
- 700 to 900 feet 45 mph
- 500 to 700 feet 40 mph
- 300 to 500 feet 35 mph
- Under 300 feet 30 mph or slower

For this analysis, no suggested advisory speed is provided for curves with a radius under 300 feet; these curves should be investigated further by the county to determine the appropriate advisory speed. Additionally, it is recommended that the county complete its own ball-bank indicator assessment of all curves to determine whether the curves on their road system meet the MUTCD requirement and to verify suggested advisory speeds.

If a curve was not selected as a project candidate through the LRSP risk assessment process (although the curve has an ADT greater than 1,000 vehicles per day and a radius under 1,100 feet), the curve was flagged for the County to determine the need for additional signs based on MUTCD guidance.

2.3.3 Rural Intersections – Crashes at Thru-STOP Intersections

On the northeast rural local roads, a severe crash is most common at Thru-STOP intersections,² where 100 percent of severe intersection crashes (5 crashes) occurred from 2008 to 2012 (Figure 2-10). Severe right-angle and angle crashes are the most common types of crashes at these intersections (Figure 2-11). While there are few crashes in the northeast region, statewide crash data support these crash types as the most common at rural Thru-STOP locations.

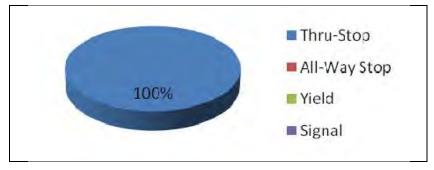


FIGURE 2-10

Northeast Region Rural Severe Crashes by Traffic Control Device (2008 to 2012)

NOTE: The percentage of all-way stop, yield, and signalized intersections crashes was zero.

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² Those intersections where traffic on the more heavily used road may proceed through the intersection without stopping, while traffic on the less-used crossroad must stop at the STOP sign before proceding through the intersection.

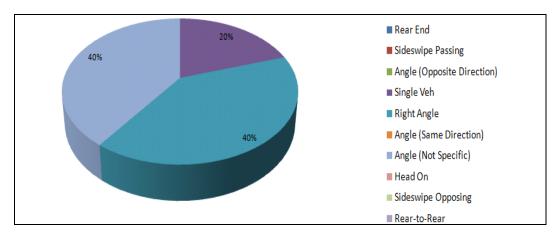


FIGURE 2-11

Northeast Region Rural Severe Crash Types (2008 to 2012)

NOTE: The percentage of rear-end, sideswipe-passing, angle (opposite direction), angle (same direction), head-on, sideswipe-opposing, and rear-to-rear crashes was zero.

In the northeast region, 225 rural intersections with 180 Thru-STOP locations were reviewed. The average severe crash density at rural Thru-STOP locations is 0.006 severe crash per intersection per year. This low density supports assessing an intersection risk based on the characteristics of the locations where severe crashes occurred. The following seven rural Thru-STOP risk factors were identified for severe right-angle crashes in the northeast region:

1. **ADT Cross Product -** 100 percent of the severe right angle crashes at rural Thru-STOP intersections occurred at intersections with an ADT cross product³ of major and minor entering vehicles greater than 100,000 (Figure 2-12). An intersection was considered to have a higher risk of severe right-angle crashes if the ADT cross product was greater than 100,000. These intersections received a star.

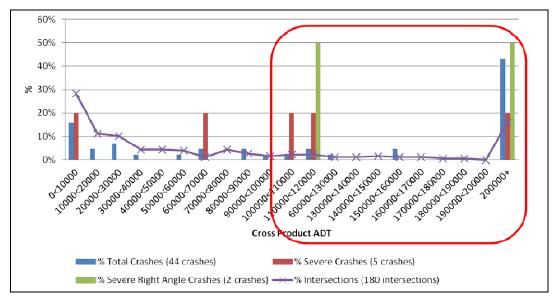


FIGURE 2-12
Northeast Region Rural Intersection ADT Cross Product (2008 to 2012)

³ The ADT cross product is the major-street entering volume multiplied by the minor-street entering volume.

2. **Skew -** As the intersection skew (the angle at which one road intersects another) increases, the crash risk also increases (Figure 2-13). At a 20-degree skew, the crash risk compared to that of a 90-degree intersection is increased by approximately 10 percent. While the northeast severe right-angle crash data set was too small to determine if skew plays a role in crashes, it has been proven nationally that the greater the skew, the greater the likelihood for a crash (Figure 2-14). Intersections with a skew greater than 20 degrees received a star.

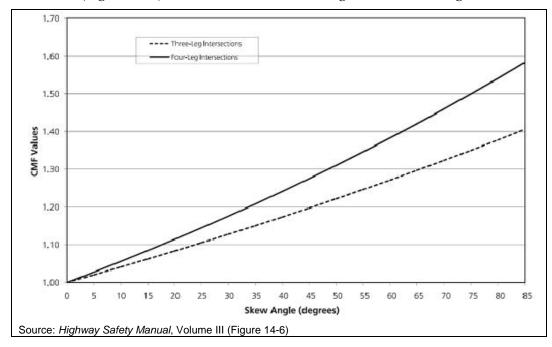


FIGURE 2-13 Intersection Skew Risk

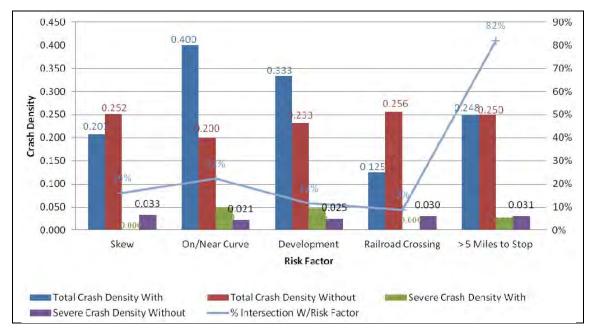


FIGURE 2-14
Rural Intersection Risk Factors for the Northeast Region (2008 to 2012)

- 3. **In or Near a Curve -**Research has shown that intersections located within or near a horizontal curve are subject to a higher level of risk. In the northeast region, intersections located in or near a horizontal curve received a star.
- 4. **Development Present -** Research has shown that intersections with commercial development in one or more quadrants have a higher level of risk, possibly due to vehicles entering or exiting the development. Private residences or farms were not included as development. Northeast region intersections with development present had more severe crash rates (Figure 2-14) and therefore received a star.
- 5. **Railroad Crossing -** Intersections at or near a railroad crossing are subject to increased risk because drivers must navigate the railroad tracks while approaching the intersection. National data were used for this risk factor due to the small number of severe crashes in the northeast region. An intersection with a railroad crossing on one of the approaches received a star.
- 6. **Previous STOP More than 5 Miles Before the Intersection -** When traveling longer distances without encountering a STOP sign, drivers lose attention, and research has shown those intersections to be at higher risk (Figure 2-14). While the northeast data had an almost even split between intersections with and without this feature, national data were used to confirm this risk factor. Intersections without a STOP sign within 5 miles received a star.
- 7. **Total Crashes –** If an intersection had any type of crash from 2008 to 2012, the intersection received a star.

The northeast region had 44 total intersection crashes from 2008 to 2012, and only 5 of those crashes are severe. Due to the small number of severe crashes, some of the data and risk factors may be misleading based on the northeast region alone. National data were frequently used to confirm intersection risk factors for the northeast region.

Detailed intersection analysis and results for the five northeast region counties is provided in Chapter 4. Due to the large number of intersections in each county, each intersection was prioritized using the seven risk factors by giving stars to each risk factor present. The highest-priority intersections received the most stars. In cases where intersections received the same number of stars, crash costs were used to break the tie and determine priority.

2.3.4 Urban Roadway Segments – Cities with Populations Greater than 5,000 (Devils Lake)

Approximately 34 miles of urban local roads were reviewed. From 2008 to 2012, 618 total and 13 severe crashes occurred on these roads. Nationally, research has shown that rear-end and head-on crashes are most common on urban local roads. In Devils Lake, 141 rear-end crashes and 9 head-on crashes occurred from 2008 to 2012.

Although a variety of data was collected for each local segment, only the following four risk factors were identified for the northeast region:

1. **Average Daily Traffic (ADT) –** Both rear-end and head-on crashes were overrepresented in road corridors with ADT volumes greater than 4,500 vehicles per day (Figure 2-15). (Note: This ADT volume includes data from Minot and Bismark.) Corridors with an ADT greater than 4,500 vehicles per day received a star.

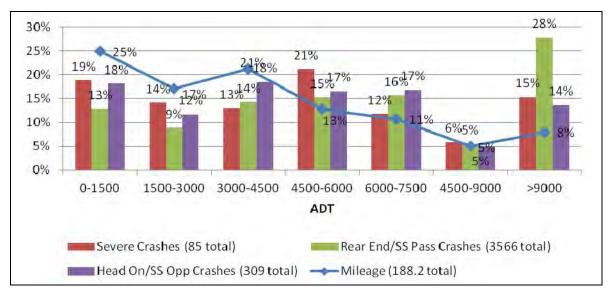


FIGURE 2-15
Phase I Urban Segment Average Daily Traffic (ADT) (2008 to 2012)

2. **Access Density –** Rear-end and head-on crashes are overrepresented in the northeast region (Devils Lake) along corridors with access densities greater than or equal to 45 access points per mile (Figure 2-16), and therefore received a star.

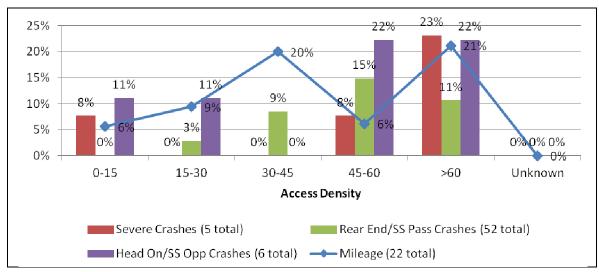


FIGURE 2-16
Devils Lake Urban Roadway Segment Access Density (2008 to 2012)

- 3. **Road Geometry –** Crashes are overrepresented per corridor mile on roadways with three or more lanes (Figure 2-17), and were given a star.
- 4. **Speed Limit -**Severe rear-end and head-on crashes were overrepresented in low-speed corridors (40 mph or less) (Figure 2-18), and therefore received a star.

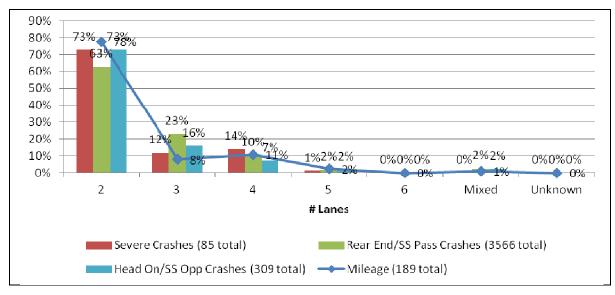


FIGURE 2-17
Phase I Urban Road Geometry (2008 to 2012)

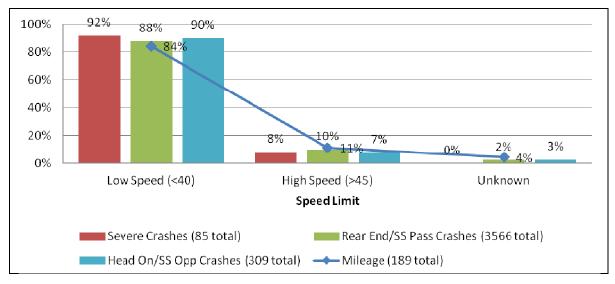


FIGURE 2-18
Phase I Urban Roadway Segment Crashes by Speed (2008 to 2012)

Detailed urban segment analysis and results for Devils Lake is provided in Chapter 4. The four risk factors were used to prioritize roadway segments, with the highest-priority segments receiving the most stars. High-priority roadway segments were also reviewed from a corridor perspective so that suggested safety improvement projects create a consistent corridor throughout the urban area.

2.3.5 Urban Intersections – Right-Angle Crashes, Cities with Populations Greater than 5,000 (Devils Lake)

In Devils Lake, 74 intersections including 7 signalized intersections were analyzed. Of the 69 total crashes, only 8 severe crashes occurred at the Devils Lake urban intersections analyzed. These data support assessing an intersection's risk based on the characteristics of locations with severe crashes. A variety of information was collected on each intersection and from that, four risk factors for right-angle crashes were chosen:

1. **Traffic Control Device** – Severe crashes are overrepresented at signalized intersections versus other intersection control types in urban areas (Figure 2-19). Therefore, signalized intersections received a star.

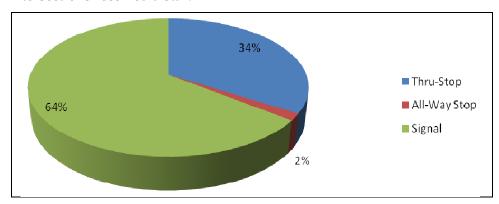


FIGURE 2-19
Phase I Urban Severe Crashes by Intersection Traffic Control Device (2008 to 2012)

2. **Entering ADT** – Higher volumes of vehicles entering intersections was considered a risk factor. All right-angle crashes at signalized intersections in the northeast region (Devils Lake) occurred at intersections with an entering vehicles ADT of greater than 7,500 vehicles per day (Figure 2-20). Therefore, any intersection with an entering vehicles ADT greater than 7,500 vehicles per day received a star.

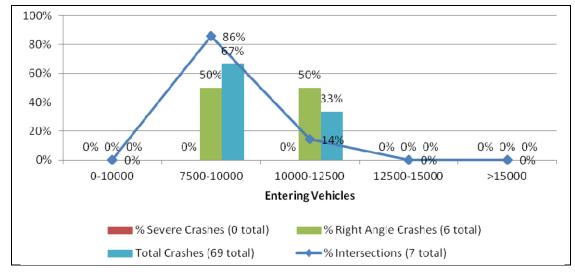


FIGURE 2-20
Devils Lake Urban Crashes by Intersection Entering Vehicles Average Daily Traffic (ADT)

- 3. **Road Geometry** Severe and right-angle crashes were overrepresented on divided roadways with signalized intersections (Figure 2-21). Therefore, intersections on divided roadways received a star.
- 4. **Severe Crashes –** Any intersection where one or more severe crashes had occurred received a star.

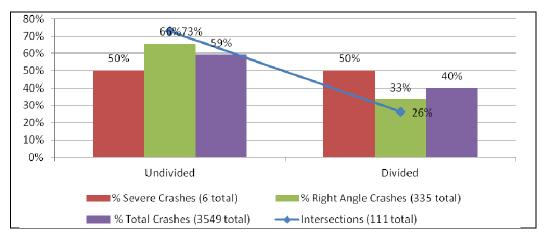


FIGURE 2-21 Northeast Region Urban Crashes by Intersection Configuration

Detailed urban intersection right angle analysis and results for Devils Lake is in Chapter 4. The four risk factors previously listed were used to help prioritize intersections with the highest priority intersections receiving the most stars. Right-angle crash intersections were reviewed as urban corridors to create a consistent corridor throughout the urban area and to discourage implementing strategies at just one or two high-priority intersections along a corridor if the remaining intersections have the same characteristics.

2.3.6 Urban Intersections – Pedestrian/Bicycle Crashes, Cities with Populations Greater than 5,000 (Devils Lake)

Similar analysis was completed for pedestrian and bicycle crashes at intersections. Only 3 severe pedestrian and bicycle crashes occurred at Devils Lake intersections from 2008 to 2012; therefore, the data have been combined with all of the Phase I urban intersection analysis. Four risk factors were identified based on the analysis:

1. **Traffic Control Device -** Severe pedestrian and bicycle crashes are overrepresented at signalized intersections versus other intersection control types in urban areas (Figure 2-22). Therefore, signalized intersections received a star.

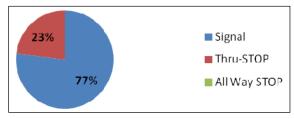


FIGURE 2-22
Phase I Urban Pedestrian/Bike Crashes by Intersection Traffic Control Devices
NOTE: The percentage of all-way STOP crashes was zero.

- 2. **Entering Vehicles ADT -** A high volume of vehicles entering an intersection was considered a risk factor. All of the northeast region severe pedestrian and bicycle crashes occurred at intersections with an entering vehicles ADT of 7,500 vehicles per day. Therefore, any intersection with an entering vehicles ADT of 7,500 vehicles per day or greater received a star.
- 3. **Pedestrian Generator –** Intersections with adjacent land uses likely to generate pedestrian traffic (such as a bar or gas station) had a higher pedestrian and bicycle crash risk than other intersections (Figure 2-23). Therefore, an intersection with a pedestrian generator present received a star.
- 4. **Pedestrian and Bicycle Crashes –** Any intersections that had any bicycle or pedestrian crash from 2008 to 2012 received a star.

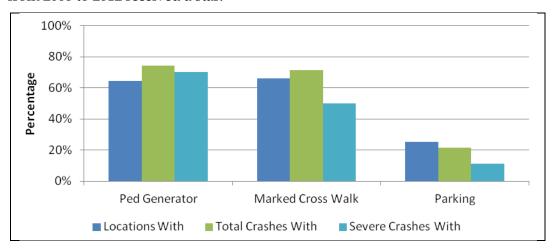


FIGURE 2-23
Phase I Pedestrian and Bicycle Crashes at Urban Signalized Intersection with a Pedestrian Generator

Detailed urban intersection pedestrian and bicycle analysis and results for Devils Lake are provided in Chapter 4. The four risk factors were used to prioritize intersections with the highest-priority intersections receiving the most stars. Pedestrian and bicycle crash intersections were reviewed as urban corridors to create a consistent corridor throughout the urban area.

2.4 Northeast Region Risk Summary

Table 2-3 summarizes the risk factors, ranges, and sources used in the northeast region systemic analysis.

TABLE 2-3
Northeast Region Risk Summary

Northeast Region Risk Summary					
		<u> </u>	Northeast Region		
Risk Factors	Minimum	Maximum	Source		
Rural Roadway Segments					
ADT Range	150	500	Northeast Region		
Lane-Departure Crash Density	0.032	Unlimited	Average Northeast Region		
Access Density	8	Unlimited	National		
Critical-Radius Curve Density	0.084	Unlimited	Average Northeast Region		
ERA	2	3	Northeast Region		
Rural Curves					
Radius	500	1,200	Northeast Region, Burleigh County, Ward County		
ADT Range	350	650	Northeast Region		
Intersection in Curve	Pres	ent	Northeast Region		
Visual Trap	Pres	ent	Northeast Region		
Severe Crashes	1	Unlimited	Northeast Region		
Rural Intersections					
ADT Cross Product	100,000	Unlimited	Northeast Region		
Skew	Pres	ent	National		
In/Near Curve	Pres	ent	Northeast Region		
Development	Pres	ent	Northeast Region		
Railroad Crossing	Pres	ent	National		
Previous STOP >5 Miles	Pres	ent	National		
Total Crashes	1	Unlimited	Northeast Region		
Urban Roadway Segments					
ADT	4,500	Unlimited	Northeast Region, Burleigh County, Ward County		
Road Geometry	Multi-	Lane	Northeast Region, Burleigh County, Ward County		
Access Density	45	Unlimited	Northeast Region		
Corridor Speeds	Lo	w	Northeast Region, Burleigh County, Ward County		
Urban Right-Angle Crash Corri	dors				
Entering Vehicles ADT	7,500	Unlimited	Northeast Region		
Traffic Control	Sig	nal	Northeast Region, Burleigh County, Ward County		
Road Geometry	Divi	ded	Northeast Region, Burleigh County, Ward County		
Severe Crashes	1	Unlimited	Northeast Region, Burleigh County, Ward County		
Urban Pedestrian/Bicycle Crasl	n Corridors				
Traffic Control	Sig	nal	Northeast Region, Burleigh County, Ward County		
Entering Vehicles ADT	7,500	Unlimited	Northeast Region		
Pedestrian Generator	Ye	es	Northeast Region, Burleigh County, Ward County		
Pedestrian/Bicycle Crashes	1	Unlimited	Northeast Region, Burleigh County, Ward County		
Notes: ADT = average daily traffic ERA = edge risk assessment					



3.0 Northeast Region Priority Safety Strategies

3.1 Background

A variety of strategies are available to address each safety emphasis area. The implementation of high-priority strategies will assist state and local agencies in reducing traffic-related fatalities and serious injuries. The primary sources for these strategies are the National Cooperative Highway Research Program (NCHRP) *Report 500* series and the National Highway Traffic Safety Administration (NHTSA) *Countermeasures That Work: A Highway Safety Countermeasure Guide for State Highway Safety Offices*, (Seventh Edition, 2013). Each guide includes a description of the problem, strategies, and model implementation processes. In addition, to assist practitioners in assessing the safety strategies, the guides document the expected effectiveness of each strategy by assigning them to one of the following categories:

- **Proven:** These strategies have been used in multiple locations with multiple studies, and have been demonstrated to be effective.
- **Tried:** These strategies have been implemented in many locations; however, no rigorous evaluations have been completed to determine their effectiveness.
- **Experimental:** These strategies represent ideas that are considered to be effective; however, the ideas have not been widely implemented or evaluated.

3.2 Initial/Comprehensive List of Potential Strategies

NCHRP safety strategies were the basis for identifying safety strategies for the LRSP. For the LRSP process, NDDOT team members sought to identify viable safety strategies for the top safety emphasis areas (see Tables 3-1 through 3-9). The LRSP team reviewed the full range of safety strategies, and did an initial screening based on cost and effectiveness. For example, the NCHRP report lists over 70 potential strategies to address intersection safety. The screening conducted by the LRSP team narrowed the list of strategies for all safety emphasis areas down to strategies considered to be the most applicable in North Dakota.

Behavioral strategies include information on the expected impact of the strategy based on current practice and results. Strategies with high impact have been shown to have influence on driver behavior.

Each infrastructure strategy includes information on the relative cost to implement or operate, along with the typical timeframe for implementation. Relative costs were separated into three categories:

- Low = less than \$10,000 per mile or location
- Medium = between \$10,000 and \$100,000 per mile or location
- High = more than \$100,000 per mile or location

The typical timeframe to implement the strategy was also separated into three categories:

- Short = less than 1 year to implement
- Medium = between 1 and 2 years to implement
- Long = more than 2 years to implement

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TABLE 3-1 Impaired Driving Strategies (Behavior Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics
A – Eliminate Drinking and Driving	A1 – Require responsible beverage service policies for alcohol servers and retailers	Proven	Advocate for responsible alcohol server and retailer training
	A2 – Employ screening and brief interventions regarding impaired driving risks	Tried	Enforcement or health care provider conducts brief intervention with crash victim after an alcohol-related crash (traumatic event) on risks and consequences of drinking and driving. Develop fact sheets and materials to be used. North Dakota Impaired Driver Safety Facts: http://www.ugpti.org/rtssc/briefs/downloads/2012 Impaired.pdf
	A3 – Support community programs for alternative transportation	Tried	Employ "Safe Cab" initiatives via partnership among beer distributors, bar owners, and county/city community programs. Conduct public outreach on accessible safe-ride alternatives.
	A4 – Promote sobriety initiatives for driving-under-the-influence (DUI) offenders	Proven	Promote 24/7 and ignition interlock programs through educating local judicial and legal counsel members, probation officers, and counseling and treatment providers, as well as the general public.
B – Enforce DUI Laws	B1 – Conduct regular high- visibility DUI enforcement saturations	Proven	A saturation is a multi-agency, multi-squad car enforcement effort. Agencies work in collaboration to provide high-visibility enforcement for high-risk roadways. High visibility enforcement includes multiple jurisdictions and/or multiple squads that are out at the same time patrolling in brightly colored vests, using signage about the enforcement and engaging the media for public outreach about the enforcement effort.
	B2 – Conduct enforcement, education and awareness campaign of the targeted enforcement of zero tolerance laws for drivers under age 21	Tried	Publicizing is best done through community events for the local media and a public education campaign in the community about the high visibility enforcement effort.
	B3 – Expand use of DUI sobriety checkpoints	Proven	Local law enforcement to expand the use of multi-jurisdictional sobriety checkpoints that include public outreach/media campaigns about the checkpoints.
	B4 – Monitor convicted DUI offenders closely	Proven	Monitor judicial sentencing of local DUI courts or intensive supervision programs

TABLE 3-2 Seat Belt Use Strategies (Behavior Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics			
A – Enforce seat belt use laws	A1 – Conduct highly publicized enforcement campaigns to maximize restraint use. Specifically, nighttime belt enforcement saturation	Proven	Publicizing is best done through community events for the local media and a public education campaign in the community about the enforcement. Methods for nighttime enforcement include having multi-agency and multiple squad cars in well-lit areas where slow-moving vehicles are passing and conducting seat belt observations for a limited time.			
	A2 – Pursue local ordinances for primary enforcement of seat belt laws					
B – Maximize use of occupant restraints by all vehicle occupants B1 – Encourage employers to 1) offer education programs to employees, and 2) enact traff safety policies with clear consequences for failure to comply		Tried	Utilize materials and policy statements designed for employers by Network of Employers for Traffic Safety. For example, seat belt use employer polices and resources: http://www.mnsafetycouncil.org/nets/EducationMaterials.cfm			
	B2 – Brief intervention regarding unbelted risks	Tried	Enforcement or health care provider conducts brief intervention with crash victim after an unbelted crash (traumatic event) on unbelted risks and consequences. Develop fact sheets and materials to be used. North Dakota Seat Belt Fact Sheet: http://www.ugpti.org/rtssc/briefs/downloads/2012_SeatBelts.pdf			

TABLE 3-3 Motorcycle Safety Strategies (Behavior Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics
A – Reduce the number of motorcycle crashes due to rider impairment	imber of motorcycle ashes due to rider high-visibility enforcement of all laws pertaining to		Publicizing is best done through community events for the local media and a public education campaign in the community about the enforcement. High-visibility enforcement is when multiple jurisdictions and/or multiple squads are out at the same time patrolling in brightly colored vests, signage, and media outreach about the enforcement. Methods for nighttime enforcement include having multi-agency and multiple squad cars in well lit areas where slow-moving riders are passing.
	A2 – Support law enforcement to identify specific motorcycle rider impairment behaviors that have been shown to contribute to crashes	Proven	Provide enforcement with motorcycle rider DUI detection resources. National Highway Traffic Safety Administration (NHTSA) Motorcycle rider DUI Detection Guide: http://www.nhtsa.gov/people/injury/pedbimot/motorcycle/610DWIMotorcyWeb/pages/
B – Reduce the number of motorcycle crashes due to unlicensed or untrained motorcycle	B1 – Ensure that licensing and rider training programs adequately teach and measure skills and behaviors required for crash avoidance	Tried	Host local motorcycle safety training courses to provide greater access to riders.
riders	B2 – Identify and remove barriers to obtaining a motorcycle endorsement	Tried	Host local motorcycle skills testing programs to enhance rider safety and prepare and encourage riders to obtain motorcycle endorsement.
C – Increase visibility of riders	C1 – Increase the awareness of the benefit of high-visibility clothing and rider conspicuity	Experimental	Publicizing is best done through the local media and a public education campaign in the community.
D – Reduce the severity of motorcycle crashes	D1 – Increase the use of FMVSS 218-compliant helmets	Proven	Conduct local public outreach on the benefits of motorcycle helmet use.

TABLE 3-4
Speed and Aggressive Driving Strategies (Behavior Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics
A – Deter aggressive driving in specific populations, including those with a history of such behavior, and at specific locations	A1 – Review crash data	Proven	Analyze crash data to define high-risk speed locations for enhanced enforcement and public outreach efforts.
	A2 – Conduct high-visibility targeted enforcement of speeding and aggressive driving	Proven	Agencies work in collaboration to provide high-visibility enforcement for high-risk roadways. High-visibility enforcement includes multiple jurisdictions and/or multiple squads that are out at the same time patrolling in brightly colored vests, using signage about the enforcement, and engaging the media for public outreach about the enforcement effort.
	A3 – Pursue local ordinances to utilize automated enforcement in high-risk areas	Proven	Under local ordinance, pursue the use of automated enforcement (speed and red-light running cameras) in high-risk highway work zones and school crossing zones. Ohio Law Enforcement Liaison Coordinator for example local ordinances using automated enforcement: http://ohiohighwaysafetyoffice.ohio.gov/doc/2013LELMap.pdf
B – Maximize driver compliance and awareness	B1 —Brief intervention regarding speed	Tried	Enforcement or health care provider conducts brief intervention with crash victim after crash due to excessive speed (traumatic event) on speed-related risks and consequences. Develop fact sheets and materials to be used. North Dakota Speed Fact Sheet: http://www.ugpti.org/rtssc/briefs/
	B2 – Increase driver awareness of speed using speed reader boards or driver feedback signs	Proven	Speed reader boards provide feedback to drivers on their actual speed. Some flash warnings when speeds reach a pre-set limit. Most effective in slowing traffic on residential streets, near school zones, and around playgrounds.

TABLE 3-5
Young Driver Strategies (Behavior Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics
A – Publicize, enforce, and adjudicate laws pertaining to young drivers	A1 – Publicize and conduct a high-visibility enforcement graduated drivers license (GDL) restrictions; cell and texting laws; underage drinking and driving; and seatbelt laws	Proven	Publicizing is best done through community events for the local media and a public education campaign in the community about the applicable laws, parental involvement and the enforcement. High-visibility enforcement is when multiple jurisdictions and/or multiple squads are out at the same time patrolling in areas frequented by teen drivers, with brightly colored vests, signage, and media outreach about the enforcement.
B – Actively engage parents in managing teen driving skill development	B1 – Encourage driver education providers (local schools and private providers) to require parent education component	Tried	Local driver education providers including local schools and private providers require 2-hour parent education program to educate parents about teen driving risks, Graduated driving license (GDL) provisions and their protections, parental role in supervising teen driving skill development, encourage selection of safer vehicles for teen driver, and to facilitate Parent/Teen Driving Agreements. teendriversource: Research Put into Action for PowerPoint presentations, parent/teen activities, and other tools to be adopted for driver education providers. www.teendriversource.org Teen Driving Parents/Alive at 25 for 1-hour parent, 4-hour teen driving program including comprehensive publication, Teen Driver; A Family Guide to Teen Safe Driving: http://www.nsc.org/products_training/Products/MotorVehicleSafety/Pages/TeenDriving.aspx
	B2 – Promote use of in-vehicle teen safety technology	Experimental	To help reduce and eliminate teen driving distractions and high-risk driving maneuvers (excessive speed, hard acceleration, deceleration, and swerves) promote the use of in-vehicle monitoring devices for parental monitoring and coaching.
	B3 – Develop safe teen driving outreach materials for parents	Tried	Encourage driver education, local insurance, and public health organizations to provide parents of teen drivers with brochures, guides, and web resources to help parents understand risks, GDL provisions, their role, and how to develop a Parent/Teen Driving Agreement, and online driving logs. Parents are the Key for free downloadable resources (can be customized): www.cdcgov/ParentsAreTheKey/ Teen Driving Parents/Alive at 25 for the comprehensive guide: Teen Driver; A Family Guide to Teen Safe Driving: http://www.nsc.org/products_training/Products/MotorVehicleSafety/Pages/TeenDriving.aspx
	B4 – Provide information on insurance provider parent-teen safe driving programs	Tried	Inform parents of local insurance programs providing policy discounts for parents and their teen enrolling in parent-teen safe driving programs.

TABLE 3-5 Young Driver Strategies (Behavior Strategies)

Objectives	Strategies	Effectiveness	Programs and Tactics
C – Educate Young Drivers	C1 – Brief interventions regarding driving risks and consequences	Tried	When teen driver receives a moving violation or is involved in a crash, enforcement or health care provider conducts brief intervention with crash victim after crash (traumatic event) on driving risks and consequences.

TABLE 3-6 Speeding Strategies (Infrastructure Strategies)

Objectives	Strategies	Effectiveness	Cost to Implement and Operate ¹	Timeframe for Implementation ²
A – Set appropriate speed limits	A1 – Install speed signage using variable message signs in school zones	Tried	Low	Medium
B – Communicate appropriate speeds	B1 – Implement active speed warning signs, including dynamic message boards at rural to urban transitions	Tried	Low	Medium
through use of traffic control devices	B2 – Use in-pavement measures to communicate the need to reduce speeds	Tried	Moderate	Short
C – Ensure that roadway design and traffic control elements support appropriate and safe speeds	C1 – Effect safe speed transitions through design elements and on approaches to lower-speed areas	Tried	High	Long

Source: NCHRP Report 500 Series, 2004

 $^{^{1}}$ Cost: Low = <\$100,000 per intersection; Moderate = \$100,000 to \$500,000 per intersection; High = >\$500,000 per intersection

² Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years

TABLE 3-7Lane Departure Strategies (Infrastructure Strategies)

Objectives	Strategies	Effectiveness	Cost to Implement and Operate ¹	Timeframe for Implementation ²
A – Keep vehicles from encroaching on the	A1 – Install shoulder rumble strips	Proven	Low	Short
roadside	A2 – Install enhanced pavement markings, edge line rumble strips, modified shoulder rumble strips, 6-inch edge line, or embedded wetreflective pavement markings on sections with narrow or no paved shoulders	Experimental / Tried	Low	Short
	A3 – Provide enhanced shoulders, lighting, delineation (for example, Chevrons), or pavement markings for sharp horizontal curves	Tried / Proven	Low	Short
	A4 – Provide skid-resistance pavement surfaces	Proven	Moderate	Medium
	A5 – Apply shoulder treatments * Eliminate shoulder drop-offs from paved road to unpaved shoulder * Safety edge * Widen and/or pave shoulders	Experimental / Proven	Moderate	Medium
B – Minimize the likelihood of crashing	B1 – Design safer slopes and ditches to prevent rollovers	Proven	Moderate to High	Medium
into an object or overturning if the vehicle travels off the shoulder	B2 – Remove/relocate objects in hazardous locations	Proven	Moderate to High	Medium
C – Reduce the severity of the crash	C1 – Improve design and application of barrier and attenuation systems	Tried	Moderate to High	Medium
D – Keep vehicles from	D1 – Install centerline rumble strips for two-lane roads	Tried	Low	Short
encroaching into opposite lane	D2 – Reallocate total two-lane roadway width (lane and shoulder) to include a "buffer median"	Tried	Low	Medium
E – Minimize the likelihood of crashing	E1 – Use alternating passing lanes or four-lane sections at key locations (Swedish "2+1")	Tried	Moderate to High	Medium
into an oncoming vehicle	E2 – Install cable median barriers for medians on multilane roads	Tried	Moderate	Medium

Source: NCHRP Report 500 Series, 2003

 $^{^{1}}$ Cost: Low = <\$10,000 per mile; Moderate = \$10,000 to \$100,000 per mile; High = >\$100,000 per mile

² Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years

TABLE 3-8 Signalized Intersection Strategies (Infrastructure Strategies)

Objectives	Strategies	Effectiveness	Cost to Implement and Operate ¹	Timeframe for Implementation ²
A – Reduce frequency and severity of	A1 – Optimize signal operation (phasing/timing, etc.)	Tried / Proven	Low	Short
intersection conflicts	A2 – Optimize clearance intervals	Proven	Low	Short
through traffic control and operational improvements	A3 – Employ signal coordination along a corridor or route	Proven	Low	Medium
improvements	A4 – Employ emergency vehicle preemption	Proven	Moderate	Medium
	A5 – Provide countdown timers, advanced walk phase, and other low-cost pedestrian/bicycle facility improvements	Tried / Proven	Low	Short
B – Reduce frequency and severity of intersection conflicts through geometric improvements	B1 – Provide/improve left-turn channelization	Proven	Moderate	Long
C – Improve pedestrian safety with signal	C1 – Install countdown timers	Tried	Low	Short
improvements	C2 – Re-time signals to provide a leading pedestrian interval (advanced walk)	Tried	Low	Short
D – Improve driver awareness of intersections and signal control	D2 – Improve visibility of signals (overhead indications, 12-inch lenses, background shields, LEDs) and signs (mast arm mounted street names) and signs (mast arm mounted street names) at intersections	Tried	Low	Short
E – Improve driver compliance with traffic control devices	E1 – Supplement conventional enforcement of red-light running with confirmation lights; include a public information campaign to increase awareness and compliance	Tried	Low	Short
F – Improve access management near signalized intersections	F1 – Restrict access to properties using driveway closures or turn restrictions	Tried	Low	Short
signalized intersections.	F2 – Restrict cross-median access near intersections	Tried	Low	Short
G – Improve safety through other infrastructure treatments	G1 – Restrict or eliminate parking on intersection approaches	Proven	Low	Short

¹ Cost: Low = <\$100,000 per intersection; Moderate = \$100,000 to \$500,000 per intersection; High = >\$500,000 per intersection

² Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years

Source: NCHRP *Report 500* Series, 2004)

TABLE 3-9Unsignalized Intersection Strategies (Infrastructure Strategies)

Objectives	Strategies	Effectiveness	Cost to Implement and Operate ¹	Timeframe for Implementation ²
A – Improve management of	A1 – Implement driveway closure/relocations	Tried	Moderate	Medium
access near unsignalized intersections	A2 – Implement driveway turn restrictions	Tried	Low	Short
B – Reduce the frequency and	B1 – Provide left-turn lanes at intersections	Proven	Moderate	Medium
severity of intersection conflicts	B2 – Provide offset left-turn lanes at intersections	Tried	Moderate to High	Medium
through geometric design improvements	B3 – Provide offset right-turn lanes at intersections	Tried	Moderate to High	Medium
	B4 – Restrict or eliminate turning maneuvers by providing channelization or closing median openings	Tried	Low	Short
	B5 – Realign intersection approaches to reduce or eliminate intersection skew	Proven	High	Medium
	B6 – Improve pedestrian and bicycle facilities to reduce conflicts between motorists and nonmotorists	Varies	Moderate	Medium
	B7 – Use indirect left-turn treatments to minimize conflicts at divided highway intersections	Tried	Moderate	Medium
C – Improve sight distance at unsignalized intersections	C1 – Clear sight triangle on approaches and in medians by clearing grub, eliminating parking, etc.	Tried	Low	Short
D – Improve driver awareness of intersections as viewed from the intersection approach	D1 – Improve visibility of intersections by providing enhanced signing, delineation or pavement markings/messages (stop bar, larger regulatory signs, LED stop signs, etc.)	Tried	Low	Short
	D2 – Improve visibility of intersections by providing appropriate street lighting	Proven	Low to Moderate	Medium
	D3 – Install larger regulatory and warning signs at intersections, including the use of dynamic warning signs at appropriate intersections	Tried	Low	Short

TABLE 3-9Unsignalized Intersection Strategies (Infrastructure Strategies)

Objectives	Strategies	Effectiveness	Cost to Implement and Operate ¹	Timeframe for Implementation ²
	D4 – Call attention to the intersection by installing rumble strips or splitter islands on intersection approaches	Tried	Low to Moderate	Medium
E – Appropriate intersection traffic control to minimize crash frequency and severity	E1 – Construct roundabouts at appropriate locations	Proven	High	Long
F – Reduce operating speeds on specific intersection approaches	F1 – Install dynamic speed feedback signs	Proven	Low	Short

Source: NCHRP Report 500 Series, 2003

 $^{^{1}}$ Cost: Low = <50,000 per intersection; Moderate = 50,000 to 500,000 per intersection; High = >500,000 per intersection

² Implementation: Short = <1 year; Medium = 1 to 2 years; Long = >2 years

3.3 Safety Strategies Workshop

A Safety Planning Workshop was held with the five northeast counties in the City of Devils Lake on June 3, 2013. Two additional workshops were held in Ward and Burleigh counties as part of the LRSP Phase I analysis. The primary focus of the safety workshop was to discuss and prioritize the safety strategies.

The basic workshop structure included introductions and an overview of the current NDDOT safety program. This was followed by local speakers, Captain Kyle Kirchmeier (North Dakota Highway Patrol) and Sharon Lipsh (Walsh County Highway Supervisor), who shared information on local safety initiatives and programs. The morning was concluded with a review of the latest crash data on the local roadway system. In the afternoon, the workshop participants separated into two groups to discuss potential safety strategies and begin the process of prioritizing the strategies. One group reviewed and discussed driver-behavior strategies and the other reviewed and discussed roadway infrastructure strategies. The final agenda item was a voting exercise where each participant voted for their preferred strategies to focus efforts on in the future local roadway program in their regions.

Workshop participants included county and city representatives, county commissioners, enforcement representatives, and NDDOT staff in order to include a variety of backgrounds and experiences to enable valuable interaction and discussions during the workshop.

3.4 Prioritizing Safety Strategies

Through the group (infrastructure and driver behavior) discussion and voting exercise, the top safety strategies for the northeast region are:

- Behavioral strategies
 - Conduct regular high-visibility driving-under-the-influence (DUI) enforcement saturations
 - Conduct high-visibility targeted enforcement of speeding and aggressive driving
 - Conduct high-visibility targeted enforcement to maximize seat belt use
 - Encourage driver education providers to require parent education component
- Infrastructure strategies
 - Rumble strips and enhance edge line (modified shoulder rumble strips, 6-inch edge line)
 - Design safer slopes and ditches to prevent rollovers if a vehicle leaves the roadway
 - Intersection lighting
 - Provide enhanced shoulders, delineation, or pavement markings for sharp horizontal curves

Safety projects that are developed as part of this LRSP are considered eligible for funding through the state's Highway Safety Improvement Program (HSIP). The managers of this program have identified implementation cost and effectiveness as priorities in their evaluation process of selecting projects for funding. Low-cost projects allow the limited funding to support a wider deployment and the use of proven-effective strategies provides the highest level of confidence that a given project will result in an overall crash reduction.

The ability of the selected strategies to reduce crashes is based on information in FHWA's CMF [Crash Modification Factors] Clearinghouse. Table 3-10 provides a summary of the crash reduction factors that were found in the CMF Clearinghouse for safety strategies considered and/or suggested for the northeast region, along with an estimated unit cost for each strategy. Most factors reported are based on research that was assigned with higher-quality ratings.

TABLE 3-10Proposed Strategies, Crash Reduction Factors, and Typical Installation Costs

Strategy	Crash Reduction Factor ^a	Typical Installation Costs	
Impaired Driving			
Conduct regular high-visibility DUI enforcement saturations	3%	Up to \$50 per hour of officer overtime	
Speed and Aggressive Driving			
Conduct high-visibility targeted enforcement of speeding and aggressive driving	3%	Up to \$50 per hour of officer overtime	
Seat Belt Use			
Conduct highly publicized enforcement campaigns to maximize restraint use. Specifically, nighttime seat belt enforcement saturation	3%	Up to \$50 per hour of officer overtime	
Young Drivers			
Publicize and conduct a high-visibility enforcement of graduated drivers license (GDL) restrictions, cell and texting laws, underage drinking and driving, and seat belt laws	3%	Depends on duration	
Encourage driver education providers to require parent education component	2%	\$1,500 per school district	
Brief interventions by health care providers following a crash regarding driving risks and consequences	N/A	Low to Moderate	
Rural Segments			
4-inch latex edge line		\$400 per mile	
6-inch latex edge line	10% to 45% all rural serious crashes	\$650 per mile	
Shoulder or edge line rumble strips	20% run off road crashes	\$3,000 per mile [shoulder] \$3,500 per mile [edge]	
Ground in wet-reflective markings		\$8,500 per mile	
Centerline rumble strips	40% head-on/sideswipe- crashes	\$3,000 per mile	
6-inch centerline		\$650 per mile	
Rural Curves			
Chevrons	20% to 30%	\$3,300 per curve	
Arrow board only		\$500 per curve	
Advance warning sign and advisory speed plaque		\$800 per curve	

TABLE 3-10Proposed Strategies, Crash Reduction Factors, and Typical Installation Costs

Strategy	Crash Reduction Factor ^a	Typical Installation Costs
2-foot paved shoulder and shoulder rumble strips	20% to 30% run-off-the- road crashes	\$37,000 per mile +\$3,000 per mile
Rural Intersections		
Roundabout	20% to 50% all crashes/ 60% to 90% right-angle crashes	\$1,000,000 per intersection
Directional median (RCI or J-Turn)	17% all crashes/ 100% angle crashes	\$750,000 per intersection
Mainline dynamic warning sign	50% all crashes/ 75% severe right-angle crashes	\$50,000 per intersection
Close median		\$25,000 per intersection
Intersection lighting	25% to 40% nighttime crashes	\$6,000 per streetlight
Upgrade signs and pavement markings	40% upgrade of all signs and pavement markings/ 15% for STOP AHEAD pavement marking	\$1,850 per approach ^b
Clear sight triangle	37% serious injury crashes	\$2,450 per intersection d
Urban		
Conversions (three-lane/five-lane)	30% to 50%	\$17,000 per mile [three-lane] \$22,000 per mile [five-lane] +\$25,000 per signalized intersection for updates (for example, loop and signal head placement)
Access management	5% to 31%	\$300,000 per mile ^e
Signal – confirmation lights	25% to 84% reduction in violations	\$1,000 per two approaches
Pedestrian/bicycle – advanced walk	Up to 60% pedestrian/ vehicle crashes	\$0 per intersection
Pedestrian/bicycle – countdown timers	25% vehicle/pedestrian crashes	\$10,000 per intersection
Pedestrian/bicycle – curb extensions	Increase in vehicles yielding to pedestrians	\$15,000 per corner
Pedestrian/bicycle – median refuge island	46% in vehicle/pedestrian crashes	\$10,000 per approach

N/A = not applicable

^a Crash reduction factors based on review of CMF Clearinghouse and other published research

^b Includes \$350 per STOP sign, \$350 per junction sign assembly, \$450 per STOP AHEAD sign, \$450 per STOP AHEAD pavement marking message, and \$250 per stop bar

^c Reduction based on increasing sight distance triangle

^d Inclusive of sigh upgrades identified and materials and labor for clearing of sight triangle.

^e For management of unsignalized intersection movements within a corridor that has a divided median. Typical project may include minor street diverters, signed turn restrictions, and median closings.



4.0 Northeast Infrastructure Safety Projects

4.1 Northeast Region Proactive Project Decision Process

The primary objectives of the LRSP effort are to identify low-cost, safety-related infrastructure projects focused on each county's documented safety emphasis areas and target crash types. These emphasis areas account for the greatest number of severe crashes occurring on the local road system. Mitigating the factors that contribute to these crashes will assist each county in reducing severe crashes on the local road system.

Projects were developed that include identifying a specific improvement at a specific location based on risk factors described in Chapter 2 and the high-priority safety strategies described in Chapter 3. Improvement strategies are consistent with the NDDOT's SHSP with a focus on proven effectiveness at reducing the target type of crash and low cost. Proven-effective strategies give safety program managers the highest level of confidence that the deployment will result in a reduction of crashes. Low-cost strategies allow improvements to be widely deployed across a system to address the low density of crashes and are less expensive than complete reconstruction of high-risk locations. Project development and mitigation focused on the following improvements:

Rural

- Lane-departure crashes along roadway segments and in curves
- Intersection-related crashes

Urban

- Rear-end and head-on crashes on roadway segments
- Angle crashes and pedestrian and bicycle crashes at intersections

For consistency across the northeast region, project decision trees were created so that locations with similar characteristics across the region received the same suggested mitigation treatment. Projects were chosen based on the identification of at-risk locations and the availability of proven strategies for crash reduction. This resulted in a systemic focus on rural paved roadway segments, horizontal paved curves, and rural intersections. In cities with populations over 5,000, the focus was on arterial and collector roadway segments and intersections along these segments. Projects were originally suggested based on the technical analysis and then revised in accordance with input from the local agencies and NDDOT.

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High-priority rural roadway segment projects focused on addressing the most common type of severe segment-related crash—a single-vehicle, lane-departure crash—by implementing road edge improvements to alert drivers when they are drifting too far to the edge of the road (Figure 4-1).

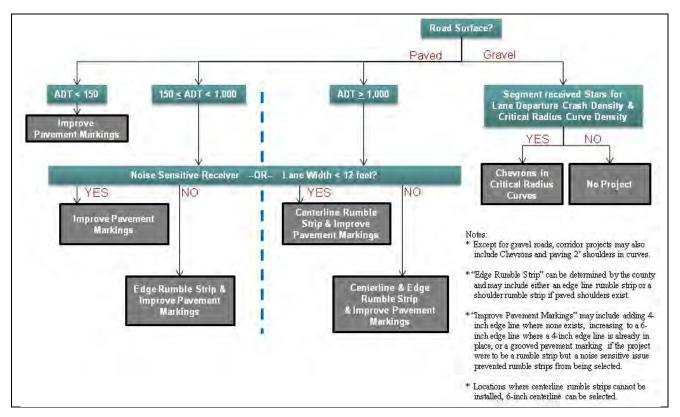


FIGURE 4-1 High-Priority Rural Roadway Segment Project Decision Tree

High-priority rural curve projects focused on enhancing the curve delineation to improve driver's ability to successfully navigate the curves (Figure 4-2). As shown in the figure, a curve is eligible for a safety improvement project in three ways.

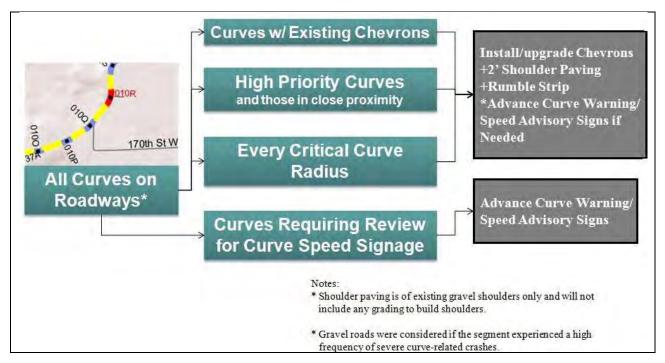


FIGURE 4-2 High-Priority Rural Curve Project Decision Tree

High-priority rural intersection projects (Figure 4-3) focused on addressing the most common type of severe intersection crash—a right-angle collision—by making the intersection more visible to drivers and by reducing the number of intersection conflicts. Examples of suggested projects are shown in Figure 4-4.

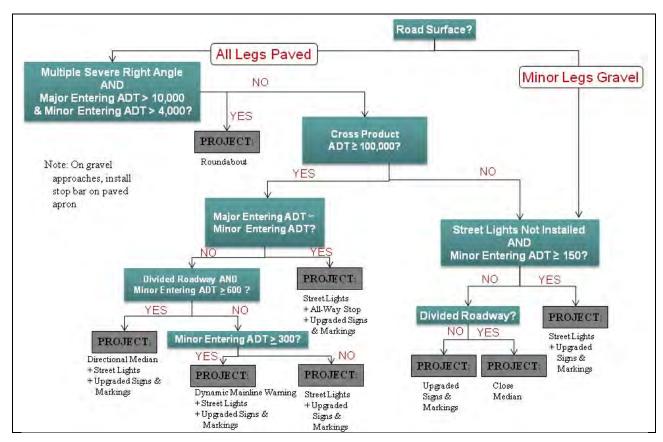


FIGURE 4-3 High-Priority Rural Intersection Project Decision Tree

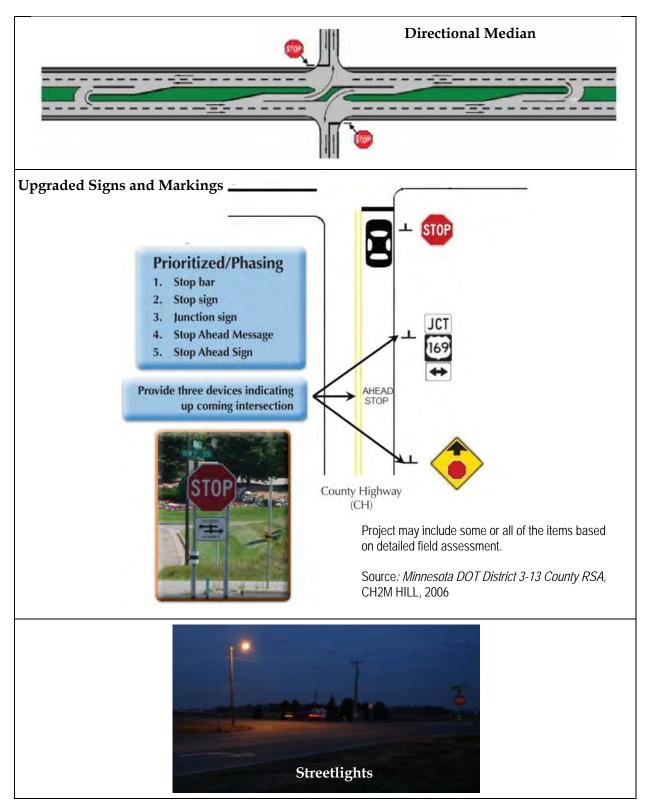


FIGURE 4-4 Intersection Safety Strategies Considered for Deployment

High-priority urban roadway segment projects focused on reducing rear-end and head-on crashes by creating buffer space in the middle of the roadway. This buffer space would be created by converting to a three-lane or five-lane roadway and by better managing access along divided arterials (Figure 4-5).

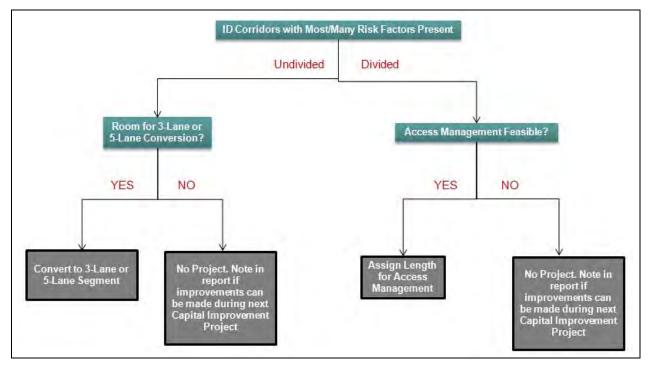


FIGURE 4-5
High-Priority Urban Roadway Segment (Turning) Project Decision Process

High-priority urban right-angle intersection projects focused on reducing right-angle crashes by reducing red-light running and managing access to reduce the number of conflict points along a corridor, particularly at signalized intersections (Figure 4-6).

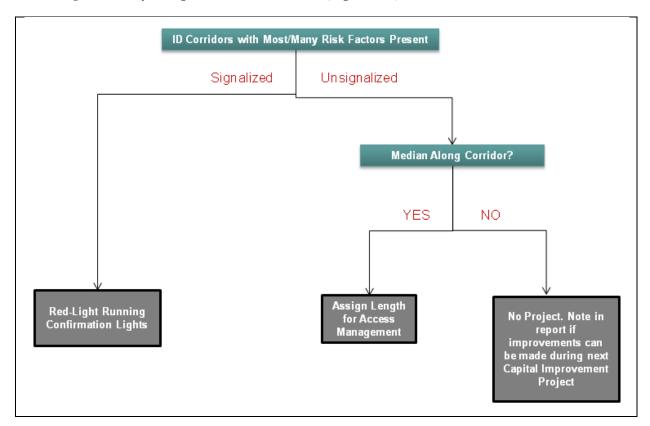


FIGURE 4-6
High-Priority Urban Right-Angle Intersection (Signalized) Project Decision Process

High-priority urban pedestrian and bicycle intersection projects focused on reducing pedestrian and bicycle crashes by providing shorter crossing distances or median refuge islands, as well as advanced walk intervals and countdown timers at signalized intersections (Figure 4-7).

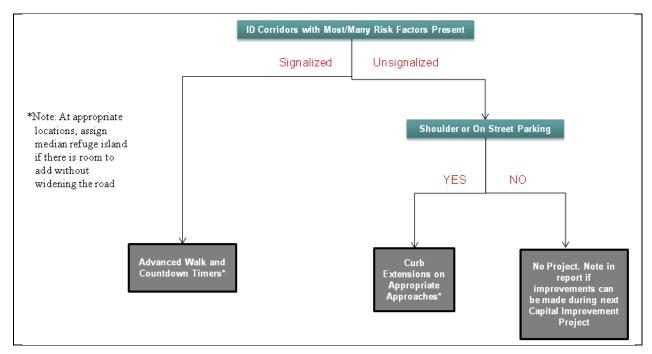


FIGURE 4-7
High-Priority Urban Pedestrian and Bicyclist Intersection Project Decision Process

Project forms were completed for each high-priority intersection, curve, and roadway segment, including a description of the location, brief crash history, ranking factors, a picture from the LRSP process of the location (if needed), and the identified safety strategy. These forms were formatted so they could be submitted directly through the HSIP process, but may require supplemental information for the evaluation and scoring process.

The suggested low-cost safety projects for the counties and the City of Devils Lake are described in the following sections. The costs assigned to each project are planning level estimates and do not include right-of-way or some other supplemental costs such as signal revisions or replacement for three-lane conversion projects. Because of funding limitations, all potential projects would not be completed in 1 year. The actual schedule for implementing individual projects will necessitate securing funding from the state's HSIP. The safety planning process followed for the northeast region is consistent with the North Dakota SHSP. In addition, several of the high-priority safety strategies are among those recommended for the state road system in the state's Strategic Plan.

It is not expected or required that each county pursue safety projects in the suggested ranking order. The ranking suggests general priorities, given that actual project development decisions will be made by each county staff based on economic, social, and political issues and in coordination with other pavement and reconstruction projects that are part of the county's Capital Improvement Program.

Many project details are still undetermined, including general project termini. Each county will determine specific project details (such as termini and exceptions) as decisions regarding implementation of specific projects are made. These decisions may require that the county coordinate with various municipal departments, the public, and other county transportation departments.

The total cost of projects suggested for the northeast region is \$3,974,372. A cost breakout by project type and county/city is provided in Table 4-1.

TABLE 4-1 Northeast Region Total Safety Project Costs

Rural Projects	Roadway Segments	Intersections	Curves	Total
Cavalier County	\$28,145	\$55,300	\$43,500	\$126,945
Nelson County	\$31,440	\$38,100	\$16,900	\$86,440
Pembina County	\$83,525	\$261,800	\$91,237	\$436,562
Ramsey County	\$179,940	\$1,005,750	\$108,830	\$1,294,520
Walsh County	\$31,170	\$305,500	\$73,100	\$409,770
Urban Projects	Roadway Segments	Intersections – Right-Angle	Intersections – Pedestrians and Bicyclists	Total
Devils Lake	\$221,135	\$604,000	\$795,000	\$1,620,135

Cavalier County

The total project cost suggested for Cavalier County is \$126,945. The project cost breakout for intersection, roadway segment, and curve projects are listed in Table 4-2. High-priority locations that received a project are shown in Figure 4-8. These locations are described in further detail in Appendix 4A along with priority rankings and suggested project sheets.

TABLE 4-2
Cavalier County Project Costs

Project Type	Cost
Intersections	\$55,300
Roadway Segments	\$28,145
Curves	\$43,500
Total	\$126,945

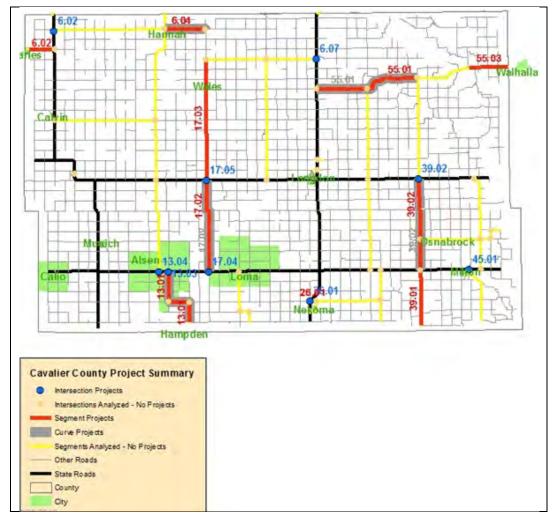


FIGURE 4-8
Cavalier County Projects Location Map

Nelson County

The total project cost suggested for Nelson County is \$86,440. The project cost breakout for intersection, roadway segment, and curve projects are listed in Table 4-3. High-priority locations that received a project are shown in Figure 4-9. These locations are described in further detail in Appendix 4B along with priority rankings and suggested project sheets.

TABLE 4-3 Nelson County Project Costs

Project Type	Cost
Intersections	\$38,100
Roadway Segments	\$31,440
Curves	\$16,900
Total	\$86,440

Two intersections are suggested for geometric review during the next capital improvement project (Table 4-4). These locations are where two gravel roads intersect and where no low-cost treatment would greatly reduce the risk other than a realignment of the roadway, which is not cost effective for the LRSP or HSIP process.

TABLE 4-4Nelson County Capital Improvement Project Consideration

Intersection ID	Intersection Description
18.04	221/2 Street (Nelson 18) and 231/2 Street (Nelson 18)
18.05	221/2 Street (Nelson 18) and 110th Ave (Nelson 18)

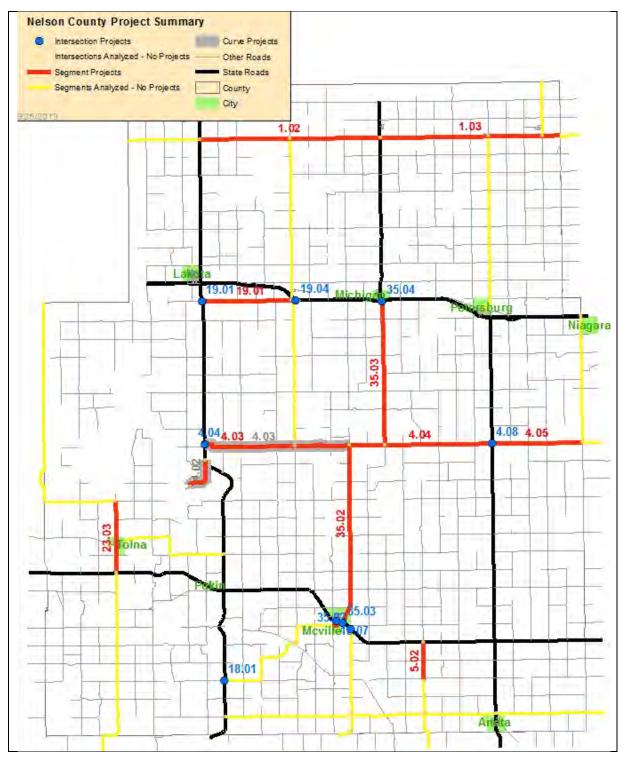


FIGURE 4-9 Nelson County Projects Location Map

Pembina County

The total project cost suggested for Pembina County is \$436,562. The project cost breakout for intersection, roadway segment, and curve projects are listed in Table 4-5. High-priority locations that received a project are shown in Figure 4-10. These locations are described in further detail in Appendix 4C along with priority rankings and suggested project sheets.

TABLE 4-5Pembina County Project Costs

Project Type	Cost
Intersections	\$261,800
Roadway Segments	\$83,525
Curves	\$91,237
Total	\$436,562

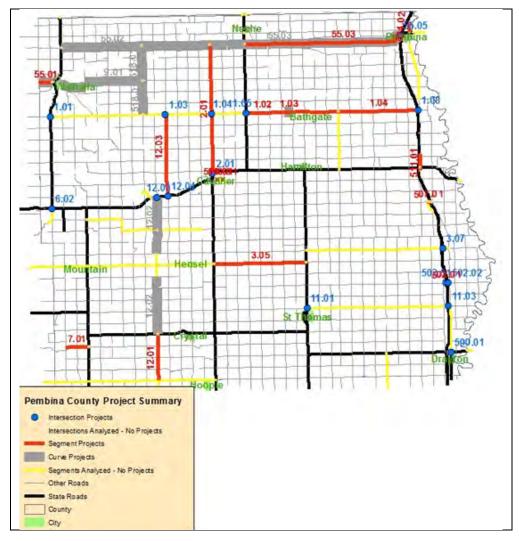


FIGURE 4-10 Pembina County Projects Location Map

Ramsey County

The total project cost suggested for Ramsey County is \$1,294,520. The project cost breakout for intersection, roadway segment, and curve projects are listed in Table 4-6. High-priority locations that received a project are shown in Figure 4-11. These locations are described in further detail in Appendix 4D along with priority rankings and suggested project sheets.

TABLE 4-6
Ramsey County Project Costs

Project Type	Cost
Intersections	\$1,005,750
Roadway Segments	\$179,940
Curves	\$108,830
Total	\$1,294,520

One intersection is suggested for geometric review during the next capital improvement project (Table 4-7). These locations are where two gravel roads intersect and where no low-cost treatment would greatly reduce the risk other than a realignment of the roadway, which is not cost effective for the LRSP or HSIP process.

TABLE 4-7Ramsey County Capital Improvement Project Consideration

Intersection ID	Intersection Description
500.02	100th Avenue and 100th Avenue

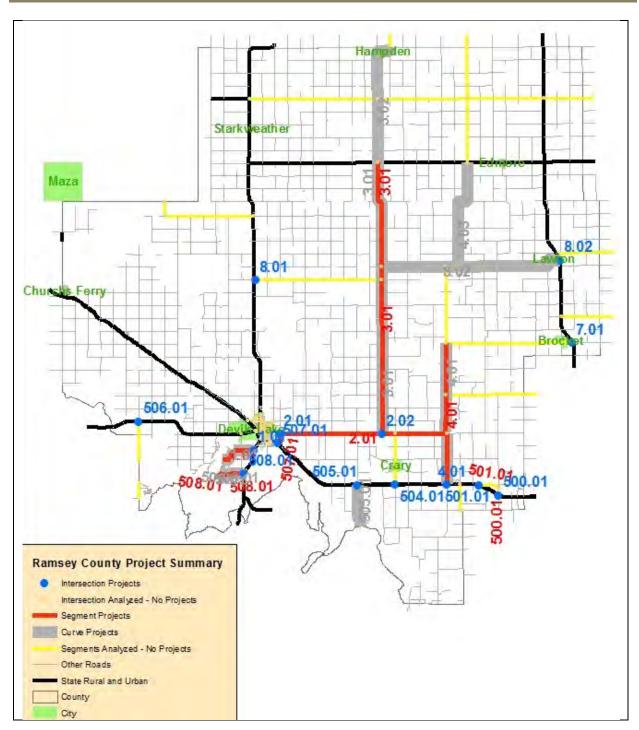


FIGURE 4-11 Ramsey County Projects Location Map

Walsh County

The total project cost suggested for Walsh County is \$409,770. The project cost breakout for intersection, roadway segment, and curve projects are listed in Table 4-8. High-priority locations that received a project are shown in Figure 4-12. These locations are described in further detail in Appendix 4E along with priority rankings and suggested project sheets.

TABLE 4-8
Walsh County Project Costs

Project Type	Cost
Intersections	\$305,500
Roadway Segments	\$31,170
Curves	\$73,100
Total	\$409,770

One intersection is suggested for geometric review during the next capital improvement project (Table 4-9). These locations are where two gravel roads intersect and where no low-cost treatment would greatly reduce the risk other than a realignment of the roadway, which is not cost effective for the LRSP or HSIP process.

TABLE 4-9Walsh County Capital Improvement Project Consideration

Intersection ID	Intersection Description
8.02	67th Street NE and 142nd Avenue NE (Walsh 8)

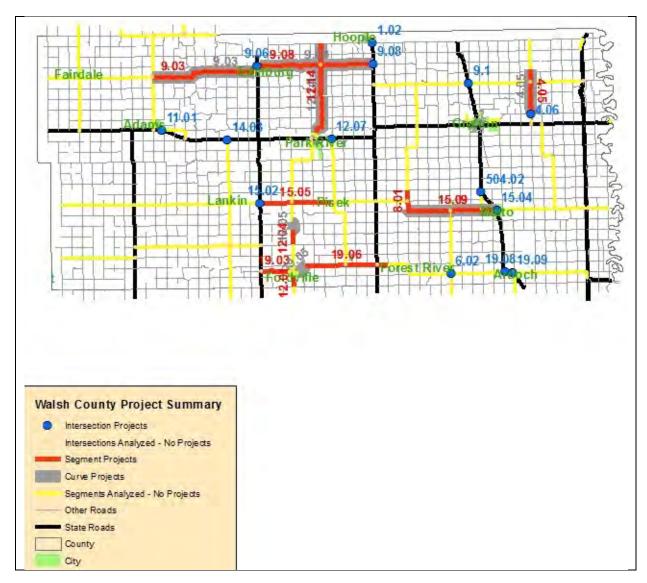


FIGURE 4-12 Walsh County Projects Location Map

City of Devils Lake

The total project cost suggested for the City of Devils Lake is \$1,620,135. The project cost breakout for roadway segment, right-angle intersection, and pedestrian/bicyclist intersection projects are listed in Table 4-10. High-priority locations that received a project are shown in Figure 4-13. These locations are described in further detail in Appendix 4F along with priority rankings and suggested project sheets.

TABLE 4-10 City of Devils Lake Project Costs

Project Type	Cost
Roadway Segments	\$221,135
Right-Angle Intersections	\$604,000
Pedestrian and Bicyclist Intersections	\$795,000
Total	\$1,620,135

Eleven roadway segments were identified as high-priority locations. However, the roadway segments are already three-lane sections, therefore no projects were suggested since three-lane corridors reduce rear-end and head-on crashes (Table 4-11).

TABLE 4-11City of Devils Lake Urban Roadway Segment Locations with Existing Treatments

Segment ID	Local Name	Segment Start	Segment End	Treatment In Place
805.02	6th Avenue NE	1st Street NE	7th Street NE	Existing three-lane
832.03	US 2	College Drive	6th Avenue NE	Access management was part of construction process
816.01	6th Street NE	College Drive North	6th Avenue NE	Existing three-lane
821.01	5th Avenue NE	Railroad Avenue	City Limit	Existing angle parking with curb extensions
832.02	US 2	Highway 19 West	College Drive	Access management was part of construction process
811.01	1st Street NE/ Railroad Avenue/ 2nd Avenue NE	8th Avenue NE	6th Street NE	Existing parallel parking with curb extensions
820.01	4th Avenue NE	Railroad Avenue	6th Street NE	Existing angle parking with curb extensions
815.01	5th Street NE	College Drive North	6th Avenue NE	Existing angle parking with curb extensions
814.01	4th Street NE	2nd Avenue NE	12th Avenue NE	Existing angle parking with curb extensions and residential area
834.04	College Drive	14th Street NE	City Limit	Existing three-lane and rural area
801.03	Frontage Rd	3rd Avenue SE	7th Ave SE	Existing too narrow

Two intersection corridors were identified as high-priority pedestrian and bicycle intersections. However, pedestrian treatments similar to those suggested in other locations are already in place, so no projects were suggested in these locations (Table 4-12).

TABLE 4-12City of Devils Lake Urban Pedestrian/Bicycle Intersection Locations with Existing Treatments

Intersection Corridor (Segment) ID	Local Name	Segment Start	Segment End	Treatment in Place
815.01	5th Street NE	2nd Avenue NE	5th Avenue NE	Pedestrian treatments already in place
832.03	US 2	College Drive	12th Avenue SE	Access management was part of construction process

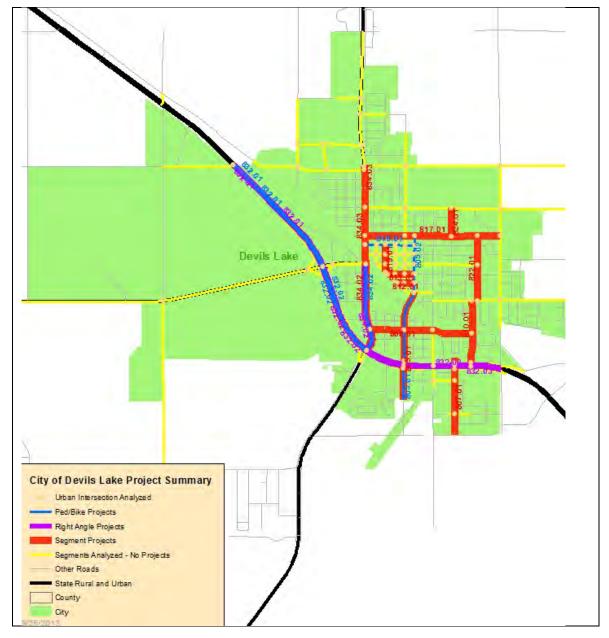


FIGURE 4-13 City of Devils Lake Projects Location Map

23 USC 409 NDDOT Reserves All Objections

Cavalier County

Cavalier County Rural Segment Projects

Page	Corridor ID	Route #	Start	End	Length	Risk Ranking	4" Edge Line	6" Edge Lines	Project Cost (\$)
1 age	39.02	Cavalier 39	ND 66	ND 5	9.1	***	0.0	9.1	\$5,915.00
2	17.03	Cavalier 17	ND 5	Cavalier 6	12.0	***	12.0	0.0	\$4,800.00
		Cavallel 17	-			* * *			
3	6.04	Cavalier 6	Cavalier 13/Hanna CL	Cavalier 17	3.9	***	3.9	0.0	\$1,560.00
4	55.03	Cavalier 55	104th Street	County Limit	3.8	**	3.8	0.0	\$1,520.00
5	6.02	Cavalier 6	M Street / Sarles	ND 20	2.7	**	2.7	0.0	\$1,080.00
6	39.01	Cavalier 39	79th Street	ND 66	5.5	**	5.5	0.0	\$2,200.00
7	13.01	Cavalier 13	County Line	ND 66	7.0	**	7.0	0.0	\$2,800.00
8	17.02	Cavalier 17	ND 66/Loma	ND 5	9.1	**	9.1	0.0	\$3,640.00
9	26.01	Cavalier 26	ND 1	Cavalier 502.01/Road to Nekoma	0.6	**	0.0	0.6	\$390.00
10	55.01	Cavalier 55	ND 1	Cavalier 39	10.6	**	10.6	0.0	\$4,240.00
-	-						54.6	9.7	\$28,145,00

Cavalier County

Rural Segment Listing

iect Sheet Page Number

Project Sheet Page*	Corridor	Route	Start	End	Length (miles)	VMT	Lane Departure Crashes	ADT	Lane Departure Density	Access Density	Curves w/ Critical Radius / Mile	Edge Risk Assesment
5	6.02	Cavalier 6	M Street / Sarles	ND 20	2.7	972,296	0	198	0.00	5.9	0.0	2
3	6.04	Cavalier 6	Cavalier 13/Hanna CL	Cavalier 17	3.9	856,718	0	120	0.00	9.7	0.3	2
7	13.01	Cavalier 13	County Line	ND 66	7.0	888,621	0	70	0.00	7.2	0.3	2
8	17.02	Cavalier 17	ND 66/Loma	ND 5	9.1	892,477	0	53	0.00	6.7	0.2	2
2	17.03	Cavalier 17	ND 5	Cavalier 6	12.0	5,315,339	2	243	0.03	6.7	0.0	2
9	26.01	Cavalier 26	ND 1	Cavalier 502.01/Road to Nekoma	0.6	252,801	0	250	0.00	14.4	0.0	1
6	39.01	Cavalier 39	79th Street	ND 66	5.5	852,902	0	85	0.00	18.6	0.0	2
1	39.02	Cavalier 39	ND 66	ND 5	9.1	4,800,526	1	290	0.02	6.1	0.2	2
10	55.01	Cavalier 55	ND 1	Cavalier 39	10.6	2,792,977	2	145	0.04	6.6	0.6	1
4	55.03	Cavalier 55	104th Street	County Limit	3.8	2,209,621	0	315	0.00	6.0	0.0	2
	504.01	0	End Gravel 13.03	County Limit	0.2	9,376	0	29	0.00	16.9	0.0	0
	505.01	0	End Gravel 13.03	County Limit	0.1	15,246	0	85	0.00	10.2	0.0	0
	506.01	93rd Street	ND 5	City Limits	0.2	7,984	0	29	0.00	13.3	0.0	0
	507.01	94th Street	Langdon City Limits	ND 1	0.5	113,267	0	130	0.00	8.4	0.0	1
	508.01	95th Street	ND 1	End of Pave	0.5	24,161	0	29	0.00	11.0	0.0	0
	510.01	80th Ave	ND 1	Nekoma City Limits	0.5	86,958	0	100	0.00	8.4	0.0	1
	·	•	•	·	66.3	20,091,272	-					'

Edge Risk Legend

Risky' - NEITHER shoulder or good clear zone
 Either a shoulder OR good clear zone
 BOTH shoulder and a good clear zone

Critical ADT Range - Lane Departure

150

500

		Lane	Critical Radius
	Access	Departure	Curves
Total	522.00	5	11
Total Mileage	66.3	66.3	66.3
Years		5	
Average Density (Total/Mile)	7.9	0.02	0.17

Cavalier County Rural Segment Prioritization - Lane Departure Priority

													Tiebrea	akers
#	Corridor	Route	Start	End	Length	ADT	ADT Range	Lane Departure Density	Access Density	Curve Critical Radius Density	Edge Risk	Totals	Edge Risk	ADT
1	39.02	Cavalier 39	ND 66	ND 5	9.1	290	*			*	*	***	2	290
2	17.03	Cavalier 17	ND 5	Cavalier 6	12.0	243	*	*			*	***	2	243
3	6.04	Cavalier 6	Cavalier 13/Hanna CL	Cavalier 17	3.9	120			*	*	*	***	2	120
4	55.03	Cavalier 55	104th Street	County Limit	3.8	315	*				*	**	2	315
5	6.02	Cavalier 6	M Street / Sarles	ND 20	2.7	198	*				*	**	2	198
6	39.01	Cavalier 39	79th Street	ND 66	5.5	85			*		*	**	2	85
7	13.01	Cavalier 13	County Line	ND 66	7.0	70				*	*	**	2	70
8	17.02	Cavalier 17	ND 66/Loma	ND 5	9.1	53				*	*	**	2	53
9	26.01	Cavalier 26	ND 1	Cavalier 502.01/Road to Nekoma	0.6	250	*		*			**	1	250
10	55.01	Cavalier 55	ND 1	Cavalier 39	10.6	145		*		*		**	1	145
11	507.01	94th Street	Langdon City Limits	ND 1	0.5	130			*			*	1	130
12	510.01	80th Ave	ND 1	Nekoma City Limits	0.5	100			*			*	1	100
13	505.01	0	End Gravel 13.03	County Limit	0.1	85			*			*	0	85
14	504.01	0	End Gravel 13.03	County Limit	0.2	29			*			*	0	29
15	506.01	93rd Street	ND 5	City Limits	0.2	29			*		-	*	0	29
18	508.01	95th Street	ND 1	End of Pave	0.5	29			*		-	*	0	29
		_	_	_	Tota	al Stars	5	2	9	5	8			
					% That Ge	ets Star	31%	13%	56%	31%	50%			

	#	%	%
****	0	0%	0%
****	0	0%	0%
***	3	19%	38%
**	7	44%	59%
*	6	38%	3%
	0	0%	0%
	16	100%	100%

ADT Range - If segment has an ADT in the range of most at risk ADT based on Northeast totals. (150 < ADT < 500)

Lane Departure Density - If segment has higher lane departure density than the Northeast average (0.032).

Access Density If segment has access density than the nationwide average (8).

Curve Critical Radius Density - If segment has higher density of curves with critical radius than the Northeast average (0.084).

Edge Risk Assessment - Edge risk of 2 or 3, based on assessment of roadway edge and clear zone.

SFN 59959 (06-2011)		Cavalier 39) from NI) 66 to	ND 5	
		Cavaller 38			_	
Agency Name: (_	ND DOT		-	
Contact Name: 1	Terry Johnston	T	Telephone N	lumber:	701-256-	2161
Email Address: t	johnsto@nd.gov					
Please attach a location map(s).	You may use additional sheet	s to further describe	e your project			
Location Description	•		, , ,			
					S	HSP Emphasis Area (check all that apply)
Start: N	ND 66	Lane Width	n: 12'			cohol Impaired Driving
End: N		Speed Limi				e Use of Safety Restraints for all Occupants
Facility Type: 2		Shoulder Width	•			river/Older Driver Safety
ADT: 2		Shoulder Type				essive Driving
Road Type F		Length (miles				nts to Address Lane Departure Crashes
County Road C		Rumble Installed				Emergency Medical Capabilities to Increase Survivability
Journy House	, a.	Trainible metanet	a. 110			ersection Safety
						oroconon canony
Describe Current Safety Is	ssues & Systemic Rank	ing Review				
North Dakota Crashes, 2008-201			5 years			
•			=		Consiler	R09/30078-JPG CHONEILL
	Total	Road Dept	K+A		117th Avenue	THE RESERVE THE PARTY OF THE PA
Crashes	2	1	1	•		Control of the Contro
Density (per mile per year)	0.04	0.02	0.02			The second second
Rate (per MVM)	0.42	0.21	0.21		0000	the same of the same of
				•	9000	
					-	Contract of the last of the la
	Value	Critical	Road			
ADT Range	290	150≤ADT≤500	*	•	-	
RD Density	0.022	0.032				A Diffe Secretary
Access Density	6.1	8.0				
Curve Critical Radius Density	0.220	0.084	*		WGS-84	
Edge Risk	2	2 or 3	*		N 48.7147583	CDC
			***	•	VV-90,1445100	DKI
Describe Proposed Safety	/ Improvements					
	Description	Type	Cost per mi	Mileage	Cost	Notes - Qualifies for edge line rumble. Curve and
	4" Edge Lines	Proactive	\$400	0.0	\$0	intersection projects suggested on other sheets.
	6" Edge Lines	Proactive	\$650	9.1	\$5,915	
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground	In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
-	6" Center Line	Proactive	\$650	0.0	\$0	_
Project Cost Estimate (att	tach detailed conv)			Proposi	ed Year o	f Construction
Tojeet eest Estimate (utt	don detaned copy)			Пороз	ca rear c	, constitution
	Federal Funds	\$5,324				
Local Matc	h (10% of Total project cost)	\$592				
	Total Project Cost	\$5,915	_			
	,	<u> </u>		<u></u>		
NDDOT Central Office On						
	☐ Yes ☐ No F	Reference Number				ID Number
Project Accepted?						
Project Accepted? [Notes						
						Page: 1
						Page: 1 Segment ID: 39.02

LUOLIWAY CAFETY IA	ADDOVEMENT DDGG	DAM (LICID)	DDO IECT	· A DDL I	CATION	
HIGHWAY SAFETY IN North Dakota Department of			PROJECT	APPLI	CATION	
SFN 59959 (06-2011)	Transportation Frogramming	ð				
,	С	avalier 17 fi	rom ND 5	to Ca	valier (6
Agency Name:	Cavalier County		ND DOT I			
Contact Name:		Т	elephone N		-	2161
	tjohnsto@nd.gov					
Please attach a location map(s).		s to further describe	e your project			
Location Description	,		, , ,			
•					SI	HSP Emphasis Area (check all that apply)
Start:		Lane Width				cohol Impaired Driving
	Cavalier 6	Speed Limi	•			e Use of Safety Restraints for all Occupants
Facility Type: ADT:		Shoulder Width Shoulder Type				river/Older Driver Safety essive Driving
	Rural Paved	Length (miles				nts to Address Lane Departure Crashes
County Road		Rumble Installed				Emergency Medical Capabilities to Increase Survivability
,						ersection Safety
Describe Organit Cafate	Innua & Cuatamia Daul	ina Daview				
Describe Current Safety North Dakota Crashes, 2008-20			5 years			
North Bakota Orashes, 2000 20	12		o years		Consilier	RUNGO157-IPG
	Total	Road Dept	K+A		G Smalls	
Crashes	2	2	0			
Density (per mile per year)	0.03	0.03	0.00			
Rate (per MVM)	0.38	0.38	0.00			
	Value	Critical	Road			
ADT Range	243	150≤ADT≤500	*			
RD Density	0.033	0.032	*		The same of	The state of the s
Access Density	6.7	8.0				
Curve Critical Radius Density	0.000 2	0.084	_		WGS-84	
Edge Risk		2 or 3	***		W 98 6060000	SRF
Describe Proposed Safet	ty Improvements					
	5	-			0 1	
-	Description	Type Proactive	Cost per mi	12.0	Cost \$4,800	Notes - Qualifies for edge line rumble.
	4" Edge Lines 6" Edge Lines	Proactive	\$400 \$650	0.0	\$4,600 \$0	
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0 \$0	
Groun	d In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
-	6" Center Line	Proactive	\$650	0.0	\$0	_
Project Cost Estimate (at	ttach detailed copy)			Propose	ed Year o	f Construction
·	• • • • • • • • • • • • • • • • • • • •					
LandlMak	Federal Funds	\$4,320				
Local Mate	ch (10% of Total project cost) Total Project Cost	\$480 \$4,800	_			
	Total Troject Cost	Ψ+,000				
NDDOT Central Office Or	nly					
Project Accepted?	Yes No F	Reference Number				ID Number
Notes						
						Page: 2
						Segment ID: 17.03
						Date: 10/23/2013

HIGHWAY SAFETY IN	ADDOVEMENT DDOG	DAM (USID)	DDO IECT	V DDI I	CATION			
North Dakota Department of SFN 59959 (06-2011)			PROJECT	APPLI	CATION	•		
,	Cavalier 6	from Cava	lier 13/Ha	anna C	L to C	avalier 17		
Contact Name:	=	Т	ND DOT I Telephone N		_	2161		
Please attach a location map(s)	tjohnsto@nd.gov	e to further describe	e vour project					
Location Description	. Tou may use additional sheet	s to futilier describe	e your project					
Location Description					S	HSP Emphasis Area (check all that apply)		
End: Facility Type: ADT: Road Type County Road	120 Rural Paved Cavalier 6	Lane Width Speed Limi Shoulder Width Shoulder Type Length (miles Rumble Installed	t: High n: 2' e: Gravel): 3.9	 □ Reduce Alcohol Impaired Driving □ Increase the Use of Safety Restraints for all Occupants □ Younger Driver/Older Driver Safety □ Curb Aggressive Driving □ Improvements to Address Lane Departure Crashes □ Enhancing Emergency Medical Capabilities to Increase Surviv □ Improve Intersection Safety 				
Describe Current Safety								
North Dakota Crashes, 2008-20	12		5 years					
	Total	Pood Dont	ΚιΛ		Covaliar 100th Street	RINGSO191_IPG		
Crashes	Total 0	Road Dept 0	K+A 0		Book			
Density (per mile per year)	0.00	0.00	0.00					
Rate (per MVM)	0.00	0.00	0.00					
rtate (per mirm)	0.00	0.00	0.00					
	Value	Critical	Road					
ADT Range	120	150≤ADT≤500						
RD Density	0.000	0.032						
Access Density	9.7	8.0	*					
Curve Critical Radius Density	0.256	0.084	*		WGS-84			
Edge Risk	2	2 or 3	*		N 48 9785050	CDC		
			***		W 80 860 A301)NI		
Describe Proposed Safet	ty Improvements							
Describe i roposcu Garet	y improvements							
	Description	Type	Cost per mi	Mileage	Cost	Notes Curve projects suggested on other sheets		
	4" Edge Lines	Proactive	\$400	3.9	\$1,560	Notes - Curve projects suggested on other sheets		
	6" Edge Lines	Proactive	\$650	0.0	\$0			
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0			
Groun	d In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0			
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0			
	6" Center Line	Proactive	\$650	0.0	\$0	<u>_</u>		
Project Coat Fatimate (a)	ttook detailed comy			Dranas	ad Vaar a	.f Comptunction		
Project Cost Estimate (at	тасп аетапеа сору)			Propose	ea rear o	f Construction		
	Federal Funds	\$1,404						
Local Mat	ch (10% of Total project cost)	\$156						
	Total Project Cost	\$1,560	_					
	•	. ,						
NDDOT Central Office Or	nly							
Project Accepted?	☐ Yes ☐ No F	Reference Number				ID Number		
Notes	•		•			•		
						Page: 3		
						Segment ID: 6.04		
	<u></u>					Date: 10/23/2013		
		•						

HIGHWAY SAFETY IN	ADDOVEMENT DDOG	DAM (HCID)	DDO IECT	V DDI	ICATION	
North Dakota Department of			PROJECT	APPL	ICATION	
SFN 59959 (06-2011)		,				
	Cavalie	er 55 from 1	04th Stre	eet to	County	/ Limit
Agency Name:	Cavalier County		ND DOT I	District:	3	
Contact Name:	Terry Johnston	Т	elephone N	lumber:	701-256-2	2161
Email Address:	tjohnsto@nd.gov					
Please attach a location map(s).	You may use additional sheets	s to further describe	e your project			
Location Description						
-					S	HSP Emphasis Area (check all that apply)
	104th Street	Lane Width				cohol Impaired Driving
	County Limit	Speed Limit	U			e Use of Safety Restraints for all Occupants
Facility Type:		Shoulder Width				river/Older Driver Safety
ADT:		Shoulder Type				essive Driving
County Road	Rural Paved	Length (miles) Rumble Installed				ents to Address Lane Departure Crashes Emergency Medical Capabilities to Increase Survivability
County Road	Cavallel 33	ixumble mstallet	i. INO			ersection Safety
					р.ото	
Describe Current Safety		ing Review				
North Dakota Crashes, 2008-20	12		5 years			
	Total	Dec I Deci	17. 4		Carreller 4000h Strong	PONCOUST.JPG CHEMHILL
Crashes	Total 1	Road Dept 0	K+A 0		East	Control of the Contro
Density (per mile per year)	0.05	0.00	0.00		-	Control of the Contro
Rate (per MVM)	0.46	0.00	0.00		- N -	The state of the s
rtate (per in rin)	00	0.00	0.00			
						AND THE RESERVE OF THE PARTY OF
					5750 A.S	0 400 0
	Value	Critical	Road			THE RESERVE AND DESCRIPTION OF THE PERSON NAMED IN
ADT Range	315	150≤ADT≤500	*		CHAPTER VA	
RD Density	0.000	0.032				
Access Density	6.0	8.0				
Curve Critical Radius Density	0.000	0.084			WGS-84	E La Barrier
Edge Risk	2	2 or 3	*		W 97.9662217	SRF
			^ ^			
Describe Proposed Safet	ty Improvements					
_	Description	Type	Cost per mi	Mileage	Cost	Notes - Qualifies for edge line rumble. Scenic backway.
	4" Edge Lines	Proactive	\$400	3.8	\$1,520	_
	6" Edge Lines	Proactive	\$650	0.0	\$0	
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$ 0	
Groun	d In Wet-Reflective Markings Center Line Rumble Strip	Proactive Proactive	\$8,500 \$3,000	0.0 0.0	\$0 \$0	
	6" Center Line	Proactive	\$650	0.0	\$0 \$0	
-					**	_
Project Cost Estimate (at	ttach detailed copy)			Propos	ed Year o	of Construction
	Endand Foods	£4.200				
Local Mate	Federal Funds ch (10% of Total project cost)	\$1,368 \$152				
Local Man	Total Project Cost	\$1,520	-			
	rotai i roject cost	Ψ1,320				
NDDOT Central Office Or	nly					
Project Accepted?	☐ Yes ☐ No F	Reference Number				ID Number
Notes						
						Page: 4 Segment ID: 55.03
						Date: 55.03
						10/20/2010

	ADDOVEMENT DDOG	PAM (HCID)	DDO IECT	. V DDI I	CATION	1
HIGHWAY SAFETY IN North Dakota Department of			PROJECT	APPLI	CATION	
SFN 59959 (06-2011)						
	Cava	lier 6 from	M Street	/ Sarle	es to N	D 20
Agency Name:	Cavalier County		ND DOT I	District:	3	
Contact Name:	Terry Johnston	T	elephone N	lumber:	701-256-2	2161
Email Address:	tjohnsto@nd.gov					
Please attach a location map(s)	. You may use additional sheet	s to further describe	e your project			
Location Description						
					S	HSP Emphasis Area (check all that apply)
	M Street / Sarles	Lane Width				cohol Impaired Driving
	ND 20	Speed Limi	0			e Use of Safety Restraints for all Occupants
Facility Type:		Shoulder Width				river/Older Driver Safety essive Driving
ADT:	Rural Paved	Shoulder Type Length (miles				nts to Address Lane Departure Crashes
County Road		Rumble Installed				Emergency Medical Capabilities to Increase Survivability
,						ersection Safety
D	I 0 O('- DI	' D'				
Describe Current Safety North Dakota Crashes. 2008-20			5 years			
North Bakota Grasiles, 2000-20	112		o years		Caracitar	TIMES 22 APR
	Total	Road Dept	K+A		100th Street	
Crashes	0	0	0		Emot	The second secon
Density (per mile per year)	0.00	0.00	0.00			
Rate (per MVM)	0.00	0.00	0.00			
						Marie Control of the
	Makes	0.:4:1	Road			
ADT Range	Value 198	Critical 150≤ADT≤500	*			
RD Density	0.000	0.032	^			Abolition in the second second second
Access Density	5.9	8.0			The second	
Curve Critical Radius Density	0.000	0.084			WGS-84	
Edge Risk	2	2 or 3	*		N 48 9498717	CDE
			**		W 50.5540050	
Describe Proposed Safe	ty Improvements					
Describe Freposed Gares	y improvements					
	Description	Type	Cost per mi	Mileage	Cost	Notes - Qualifies for edge line rumble.
•	4" Edge Lines	Proactive	\$400	2.7	\$1,080	<u> </u>
	6" Edge Lines	Proactive	\$650	0.0	\$0	
_	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Groun	nd In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0 \$0	
	Center Line Rumble Strip 6" Center Line	Proactive Proactive	\$3,000 \$650	0.0 0.0	\$0 \$0	
	O OCHROLEING	TTOGOTIVE	ΨΟΟΟ	0.0	ΨΟ	_
Project Cost Estimate (at	ttach detailed copy)			Propos	ed Year o	f Construction
	Federal Funds	\$972				
Local Mat	ch (10% of Total project cost)	\$108				
20001 11101	Total Project Cost	\$1,080				
	•	. ,				
NDDOT Central Office Or						
Project Accepted?	Yes No F	Reference Number				ID Number
Notes						
						Page: 5
						Segment ID: 5
						Date: 10/23/2013

Cavaller 39 from 79th Street to ND 66 Agency Name: Cavaller County Contact Name: Terry Johnston Email Address: iphonic Bind gov Please attach a location map(a). You may use additional sheets to further describe your project Location Description Start 78th Street Ends. No 66 Speed Limit. High Positive Corel Ends. No 66 Footbay Part Power Corel Footbay ADT: 85 Road Tyte Rural Pavest County Road Cavaller 39 Road Tyte Rural Pavest County Rural Pavest County Rural Pavest County Rural Pavest County Rural Pavest Road Tyte Rural Pavest	SFN 59959 (06-2011)	<u> </u>	valiar 20 fr	om 70th (Stroot	to ND (ee .
Contact Name: Terry Johnston Email Address: johnsto @M. dow Please attach a location map(i). You may use additional sheets to further describe your project Location Description Start. 79th Street Earlie Type: 2-fane ADT: 85 Shoulder Midth: 22 ADT: 85 Shoulder Midth: 2 Shoul	A N		valler 39 fro				00
Please attach a bordon mapple. You many use additional shorts to further describe your project Contain Description			_	_		-	0404
Please attach a location map(s), You may use additional sheets to further describe your project		•	ı	elephone N	lumber:	701-256-	2161
SHSP Emphasis Area (check all that apply) Slast: 78th Street End. ND 66 Speed Limit. High Facility Type: 2-lane ADT: 86 Road Type Rural Pavid Conting Type: Glavel Longth (ribles): 5.5 Road Sype Rural Pavid Conting Type: Glavel Longth (ribles): 5.5 Road Sype Rural Pavid Conting Type: Glavel Longth (ribles): 5.5 Road Sype Rural Pavid Conting Type: Glavel Longth (ribles): 5.5 Road Sype Rural Pavid Conting Type: Glavel Longth (ribles): 5.5 Road Sype Rural Pavid Conting Type: Glavel Longth (ribles): 5.5 Road Sype Rural Pavid Conting Type: Glavel Longth (ribles): 5.5 Road Sype Rural Pavid Rural Benatice No Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008-2012 5 years Total Road Dept: K+A Density (per mile per year) ADT Range Rible Density Describe Proposed Safety Improvements ADT Range Rible Density Describe Rible ADT Range Rible Density Describe Rible Rible Density Rible Density Describe Rible Rible Density Describe Rible Rible Density Describe Rible Rible Density Describe Rible Rible Density Ribl							
Slart. 76th. Street	Please attach a location map(s).	You may use additional sheet	s to further describe	e your project			
Slatt 79th Street	Location Description						
End: ND 66 Facility Type: 2-lane ADT: 85 Roud Type Rural Paved County Road Cavaler 39 Round Type Rural Paved County Road Cavaler 39 Round End Cavaler 39 Round County Road Cavaler 39 Round End Facility Road Cavaler 39 Round End Facility Road Cavaler 39 Round End Facility Road Cavaler 39 Road Dept K+A Crashes 1 0 0 0 0.00 Density per mile per year) 0.04 Rate (per MVM) 1.17 0.00 0.00 Robert Density County Road End Facility Ro						S	HSP Emphasis Area (check all that apply)
Facility Type: 2-lane ADT is a	Start:	79th Street	Lane Width	n: 12'		Reduce Alc	cohol Impaired Driving
Road Type Rural Paved County Road Cavaller 39 Road Type Rural Paved County Road Cavaller 39 Rumbile Installed: No Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008-2012 Total Road Dept K+A Crashes 1 0 0 0 Density (per mile per year) 0.04 0.00 0.00 Rate (per MVM) 1.17 0.00 0.002 ADT Range 85 1508ADT5500 RD Density (per mile per year) 0.09 0.092 Access Density 18.00 8.002 ACCURRED ROBE 2 2 07 3 ** Describe Proposed Safety Improvements Pedge Rural Capabilities to Increase Survivability Describe Proposed Safety Improvements Describe Proposed Safety Improvements Proactive \$550 0.0 \$0 Ground In Wet-Reflective Markings Center Line Rumbile Strip Ground In Wet-Reflective Markings Center Line Rumbile Strip Proactive \$850 0.0 \$0 Center Line Rumbile Strip Proactive \$850 0.0 \$0 Reflerance Strip Robert Strip Rob			Speed Limi	t: High			
Road Type Rural Paved County Road Cayraller 39 Rumbble Installed: No mprovements to Address Lane Departure Crashes County Road Cayraller 39 Rumbble Installed: No mprove Intersection Safety Improve Intersection Safety Possoribe Current Safety Issues & Systemic Ranking Review North Daxota Crashes, 2008-2012 Total Road Dept Acrashes 1 0 0 0.00 Road (per NWA) 1.17 0.00 0.00 Road (per NWA) 1.17 0.00 0.00 0.032 Acrashes 1 65 RD Density 0.000 0.034 Acrashes 2 0.00 AC Sess Density 18.6 8.0 8.0 Curve Critical Radius Density 0.000 0.084 Edge Risk 2 2 2 or 3 ** Posscribe Proposed Safety Improvements Posscribe Proposed Safety Improvements Describe Road Dept	Facility Type:	2-lane	Shoulder Width	n: 2'			
County Road Cavalier 39							
Improve Intersection Safety Improve Intersection Safety Intersection S							
Describe Current Safety Issues & Systemic Ranking Review Syears	County Road	Cavalier 39	Rumble Installed	d: No			
Total					Ш	Improve Int	tersection Safety
Total	December Occurred Co.	lanuar a Curtumia D	ina Davis				
Crashes							
Total Road Dept K+A O O O O O O O O O	North Dakota Crashes, 2008-20	12		5 years			
Crashes		Tatal	Don't Don't	17. 4		Cerviller 117th Assessed	PANGOCHELIPS CHEMPILL
Density (per mile per year)	Ones have					South	
Nate (per MVM)		•		-			TT No. 27 HARD STORY
Value							And the second second
ADT Range	Rate (per MVM)	1.17	0.00	0.00			
ADT Range							The second second
ADT Range							
ADT Range			0 22 1	Dand			All Control of the Co
RD Density				Road			The state of the s
Access Density	_						
Curve Critical Radius Density 0.000 0.084 2 or 3	-			_			
Edge Risk 2 2 or 3 * * * * * * * * * * * * * * * * * *	-			*		Marie Contract	
Describle Proposed Safety Improvements	•					WGS-84 N 48 5877950	
Describle Proposed Safety Improvements	Euge Risk	2	2013			W 98.1444083	ISRF
Description Type Cost per mi Mileage Cost Notes -				^ ^			
Description Type Cost per mi Mileage Cost Notes -	Describe Proposed Safet	ty Improvements					
A* Edge Lines Proactive \$400 5.5 \$2,200 6* Edge Lines Proactive \$650 0.0 \$0 Edge Rumble Strip Proactive \$3,500 0.0 \$0 Center Line Rumble Strip Proactive \$3,500 0.0 \$0 Center Line Rumble Strip Proactive \$3,000 0.0 \$0 Center Line Rumble Strip Proactive \$3,000 0.0 \$0 6* Center Line Proactive \$650 0.0 \$0 Project Cost Estimate (attach detailed copy) Project Cost Estimate (attach detailed copy) Project Cost Estimate (attach detailed copy) Federal Funds \$1,980 Local Match (10% of Total project cost) \$220 Total Project Cost \$2,200 NDDOT Central Office Only Project Accepted?	Describe i roposcu Gure.	y improvements					
A* Edge Lines Proactive \$400 5.5 \$2,200 6* Edge Lines Proactive \$650 0.0 \$0 Edge Rumble Strip Proactive \$3,500 0.0 \$0 Center Line Rumble Strip Proactive \$3,500 0.0 \$0 Center Line Rumble Strip Proactive \$3,000 0.0 \$0 Center Line Rumble Strip Proactive \$3,000 0.0 \$0 6* Center Line Proactive \$650 0.0 \$0 Project Cost Estimate (attach detailed copy) Project Cost Estimate (attach detailed copy) Project Cost Estimate (attach detailed copy) Federal Funds \$1,980 Local Match (10% of Total project cost) \$220 Total Project Cost \$2,200 NDDOT Central Office Only Project Accepted?		Description	Tuno	Coot por mi	Mileogo	Cont	Natas
6" Edge Lines Proactive \$650 0.0 \$0 Edge Rumble Strip Proactive \$3,500 0.0 \$0 Ground In Wet-Reflective Markings Proactive \$3,500 0.0 \$0 Center Line Rumble Strip Proactive \$3,000 0.0 \$0 Center Line Rumble Strip Proactive \$650 0.0 \$0 Project Cost Estimate (attach detailed copy) Project Cost Estimate (attach detailed copy) Project Cost Estimate (10% of Total project cost) \$2,20 Total Project Cost \$2,200 NDDOT Central Office Only Project Accepted? Yes No Reference Number ID Number Notes Page: 6 Segment ID: 39,01	-						Notes -
Edge Rumble Strip Ground In Wet-Reflective Markings Proactive \$8,500 0.0 \$0 0.0 \$0 0.0 \$0 Center Line Proactive \$8,500 0.0 \$0 0.0 \$0 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Proposed Year of Construction Project Cost Estimate (attach detailed copy) Proposed Year of Construction Project Cost Estimate (attach detailed copy) Proposed Year of Construction Project Cost Estimate (attach detailed copy) Proposed Year of Construction Project Cost Estimate (attach detailed copy) Project Co		· ·					
Ground In Wet-Reflective Markings Center Line Rumble Strip Proactive \$3,000 0.0 \$0 Center Line Rumble Strip Proactive \$3,000 0.0 \$0 6' Center Line Proactive \$650 0.0 \$0 Project Cost Estimate (attach detailed copy) Federal Funds Local Match (10% of Total project cost) \$2,20 Total Project Cost \$2,200 NDDOT Central Office Only Project Accepted? Yes No Reference Number ID Number Notes Page: 6 Segment ID: 39.01		•					
Center Line Rumble Strip Proactive \$3,000 0.0 \$0 6" Center Line Proactive \$650 0.0 \$0 Project Cost Estimate (attach detailed copy) Federal Funds \$1,980 Local Match (10% of Total project cost) \$220 Total Project Cost \$2,200 NDDOT Central Office Only Project Accepted? Yes No Reference Number ID Number Page: 6 Segment ID: 39.01	Group						
Center Line Proactive \$650 0.0 \$0	Gibuil	•					
Project Cost Estimate (attach detailed copy) Federal Funds \$1,980 Local Match (10% of Total project cost) \$220 Total Project Cost \$2,200 NDDOT Central Office Only Project Accepted? Yes No Reference Number ID Number Notes Page: 6 Segment ID: 39.01		•					
Federal Funds \$1,980 Local Match (10% of Total project cost) \$220 Total Project Cost \$2,200 NDDOT Central Office Only Project Accepted?	-	,					_
Federal Funds \$1,980 Local Match (10% of Total project cost) \$220 Total Project Cost \$2,200 NDDOT Central Office Only Project Accepted?	Project Cost Estimate (at	ttach detailed copy)			Propose	ed Year o	of Construction
Local Match (10% of Total project cost) \$220 Total Project Cost \$2,200 NDDOT Central Office Only Project Accepted? Yes No Reference Number ID Number Notes Page: 6 Segment ID: 39.01	•						
Total Project Cost \$2,200 NDDOT Central Office Only Project Accepted? Yes No Reference Number ID Number Notes Page: 6 Segment ID: 39.01		Federal Funds	\$1,980				
NDDOT Central Office Only Project Accepted?	Local Mate		\$220				
Project Accepted?		Total Project Cost	\$2,200				
Project Accepted?		<u> </u>					
Notes Page: 6 Segment ID: 39.01							
Page: 6 Segment ID: 39.01	Project Accepted?	☐ Yes ☐ No F	Reference Number				ID Number
Segment ID: 39.01	Notes						
Segment ID: 39.01							
Segment ID: 39.01							
Segment ID: 39.01							
Segment ID: 39.01							
Segment ID: 39.01							
Segment ID: 39.01							
Segment ID: 39.01							
Segment ID: 39.01							Paue. 6
							Date: 10/23/2013

HIGHWAY SAFETY II	MPROVEMENT PROG	RAM (HSIP)	PROJECT	ΔPPI I	CATION	J		
North Dakota Department of			. KOOLO.	A L.	OA1101	•		
SFN 59959 (06-2011)		9						
· · · · · ·	Cav	valier 13 fro	m Count	v Line	to ND	66		
Agency Name:	Cavalier County		ND DOT I	-				
		-				04.04		
	Terry Johnston		Telephone N	iumber:	/01-256-	2161		
	tjohnsto@nd.gov							
Please attach a location map(s)). You may use additional sheet	s to further describe	e your project					
Location Description								
						HSP Emphasis Are		at apply)
	County Line	Lane Width				cohol Impaired Driv		
	ND 66	Speed Limi	•			e Use of Safety Re		Occupants
Facility Type:		Shoulder Width			-	river/Older Driver S	afety	
ADT:		Shoulder Type				essive Driving		
County Road	Rural Paved	Length (miles Rumble Installed				ents to Address Lan		asnes o Increase Survivability
County Road	Cavaller 13	Numble mstallet	u. NO			tersection Safety	ai Capabilities to	o increase Survivability
					improve im	icrocollori Galety		
Describe Current Safety	Issues & Systemic Rank	kina Review						
North Dakota Crashes, 2008-20			5 years					
			- ,		Cresitor	######################################	R.JIPCR	CHOMPHEL
	Total	Road Dept	K+A		6			
Crashes	1	0	0		South			
Density (per mile per year)	0.03	0.00	0.00					
Rate (per MVM)	1.12	0.00	0.00					
	Value	Critical	Road		THE RESERVE		C. Andrewskiller	
ADT Range		150≤ADT≤500					No.	
RD Density		0.032			CHARGE CO.	Sentito 1	The State of the S	
Access Density		8.0				-		A STATE OF THE PARTY OF THE PAR
Curve Critical Radius Density	_	0.084	*		WGS-84			1
Edge Risk	2	2 or 3	*		W 98 6883317			SRF
			^ ^					
Describe Proposed Safe	tv Improvements							
	, ,							
	Description	Type	Cost per mi	Mileage	Cost	Notes - Curve an	d intersection n	rojects suggested on other
	4" Edge Lines	Proactive	\$400	7.0	\$2,800	sheets	a intersection p	rojecto suggesteu dir otrici
	6" Edge Lines	Proactive	\$650	0.0	\$0	0.10010		
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0			
Groui	nd In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0			
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0			
	6" Center Line	Proactive	\$650	0.0	\$0	_		
5 : 10 15 :: 1 (_				
Project Cost Estimate (a	ttacn detalled copy)			Propose	ea year c	of Construction		
	Federal Funds	\$2,520						
Local Mar	tch (10% of Total project cost)	\$280						
Local Ma	Total Project Cost	\$2,800	_					
	Total Troject Gost	Ψ2,000						
NDDOT Central Office O	nlv							
Project Accepted?		Reference Number	T			ID Number		
Notes	,=		- J			-\\\		
							Page:	7
						Seam	ent ID:	13.01
							Date:	10/23/2013

LUOLIMAN OAFETVIA	ADDOVEMENT DDGG	DAM (HOID)	DDO IEOT	ABBLI	OATION	
HIGHWAY SAFETY IN North Dakota Department of			PROJECT	APPLI	CATION	
SFN 59959 (06-2011)	Transportation Programming	9				
,	Ca	valier 17 fro	om ND 66	3/Loma	a to ND	5
Agency Name	Cavalier County		ND DOT I			
Contact Name:		Т	elephone N		-	2161
	tjohnsto@nd.gov	-	olopilollo i			
Please attach a location map(s).		s to further describe	a vour project			
Location Description	. Tournay use additional sheet	3 to further describe	s your project			
Location Description					S	HSP Emphasis Area (check all that apply)
Start:	ND 66/Loma	Lane Width	n: 12'			cohol Impaired Driving
End:	ND 5	Speed Limi	t: High		Increase th	e Use of Safety Restraints for all Occupants
Facility Type:		Shoulder Width				river/Older Driver Safety
ADT:		Shoulder Type				essive Driving
	Rural Paved	Length (miles)				ents to Address Lane Departure Crashes
County Road	Cavaller 17	Rumble Installed	J. NO		Improve Int	Emergency Medical Capabilities to Increase Survivability tersection Safety
]	improve in	oracollori Caroty
Describe Current Safety	Issues & Systemic Rank	ring Review				
North Dakota Crashes, 2008-20	12		5 years			
					Colonillas	RING0171.JPG CHONNIL
	Total	Road Dept	K+A		South	
Crashes	0 0.00	0 0.00	0 0.00			
Density (per mile per year) Rate (per MVM)	0.00	0.00	0.00			
reate (per wrow)	0.00	0.00	0.00			
	Value	Critical	Road			
ADT Range	53	150≤ADT≤500				All
RD Density	0.000	0.032			GENERAL T	No. of the Contract of the Con
Access Density	6.7	8.0			No. of the last	
Curve Critical Radius Density	0.219	0.084	*		WG5-84	
Edge Risk	2	2 or 3	**		W 98 6008517	SRF
			^ ^			
Describe Proposed Safet	ty Improvements					
_	Description	Type	Cost per mi	Mileage	Cost	Notes - Intersection projects suggested on other sheets
	4" Edge Lines	Proactive	\$400	9.1	\$3,640	_
	6" Edge Lines	Proactive	\$650	0.0	\$0	
Crown	Edge Rumble Strip and In Wet-Reflective Markings	Proactive	\$3,500	0.0	\$0 \$0	
Glouin	Center Line Rumble Strip	Proactive Proactive	\$8,500 \$3,000	0.0 0.0	\$0 \$0	
	6" Center Line	Proactive	\$650	0.0	\$0	
-					•	-
Project Cost Estimate (at	ttach detailed copy)			Propose	ed Year o	of Construction
	Federal Funds	\$3,276				
Local Mate	ch (10% of Total project cost)	\$3,270 \$364				
Loodi Wat	Total Project Cost	\$3,640	_			
		40,010				
NDDOT Central Office Or	nly					
Project Accepted?	Yes No F	Reference Number				ID Number
Notes						
						Daga: 0
						Page: 8 Segment ID: 17.02
						Date: 10/23/2013

HIGHWAY SAFETY IN	MPROVEMENT PROG	RAM (HSID)	PRO IFCT	V DDI I	CATION	
	Transportation Programming	` ,	FROJECT	AFFLI	CATION	`
	Cavalier 26 fr	om ND 1 to	Cavalie	r 502.0	1/Roa	d to Nekoma
Contact Name: Email Address:	Cavalier County Terry Johnston tjohnsto@nd.gov		ND DOT I elephone N		_	2161
Please attach a location map(s)	. You may use additional sheets	to further describe	your project			
Location Description						
Facility Type: ADT: Road Type County Road	Cavalier 502.01/Road to Nek 2-lane 250 Rural Paved Cavalier 26	Lane Width Speed Limi Shoulder Width Shoulder Type Length (miles) Rumble Installed	t: High :: 6' e: Paved): 0.6		Reduce Ald Increase th Younger D Curb Aggre Improveme Enhancing	iHSP Emphasis Area (check all that apply) cohol Impaired Driving te Use of Safety Restraints for all Occupants river/Older Driver Safety tessive Driving tents to Address Lane Departure Crashes Emergency Medical Capabilities to Increase Survivability tersection Safety
	Issues & Systemic Ranki					
North Dakota Crashes, 2008-20	112	;	5 years			
Crashes	Total 0	Road Dept	K+A 0		Cavallar c West	REMODETE.JPG
Density (per mile per year)	0.00	0.00	0.00			
Rate (per MVM)	0.00	0.00	0.00			
	Value	Critical	Road		L	
ADT Range	250	150≤ADT≤500	*		-	
RD Density	0.000	0.032			A STATE	A second
Access Density	14.4	8.0	*		H. I.	
Curve Critical Radius Density	0.000	0.084			WGS-84	
Edge Risk	1	2 or 3			N 48 5872533	ECDE
			**		W 50.575055	
Describe Proposed Safe	ty Improvements					
	Description	Type	Cost per mi	Mileage	Cost	Notes - Qualifies for edge line rumble.
	4" Edge Lines	Proactive	\$400	0.0	\$0	Notes - Qualifies for eage life fulfible.
	6" Edge Lines	Proactive	\$650	0.6	\$390	
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Groun	nd In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
	6" Center Line	Proactive	\$650	0.0	\$0	_
Project Cost Estimate (a	ttach detailed copy)			Propose	ed Year c	of Construction
	Federal Funds	\$351				
Local Mat	ch (10% of Total project cost)	\$39				
200a. Mat	Total Project Cost	\$390	_			
	,	•				
NDDOT Central Office Or	nly					
Project Accepted?	☐ Yes ☐ No R	eference Number				ID Number
Notes						
			·	-	-	Page: 9
						Segment ID: 26.01
						Date: 10/23/2013

HIGHWAY SAFETY IM lorth Dakota Department of T FN 59959 (06-2011)			PROJECT	APPL	CATION	
, , ,	Ca	avalier 55 fro	om ND 1	to Ca	valier 3	9
Agency Name: 0	Cavalier County		ND DOT	District:	3	
Contact Name: 1	-	Te	elephone N	lumber:	701-256-2	2161
	johnsto@nd.gov					
Please attach a location map(s).	You may use additional sheet	s to further describe	your project			
ocation Description						100 5 orbitals Associated all that apply)
Start: N	ND 1	Lane Width:	. 10'			HSP Emphasis Area (check all that apply) ohol Impaired Driving
	Cavalier 39	Speed Limit				e Use of Safety Restraints for all Occupants
Facility Type: 2	2-lane	Shoulder Width:	: 1'		Younger Dr	iver/Older Driver Safety
ADT: 1		Shoulder Type:				ssive Driving
Road Type F County Road (Length (miles): Rumble Installed				nts to Address Lane Departure Crashes Emergency Medical Capabilities to Increase Survivability
Ounty Noad S	Javaner JJ	Nullipie instanca	. INO			ersection Safety
Describe Current Safety Is	seuse & Systemic Rank	ring Paview				
North Dakota Crashes, 2008-201			5 years			
,					Greatler	RINGSCO1 APG
Crashas	Total	Road Dept	K+A		Enst	1700
Crashes Density (per mile per year)	3 0.06	2 0.04	0 0.00			
Rate (per MVM)	1.07	0.72	0.00			The second second
, , , , , , , , , , , , , , , , , , ,						4.6 A
					193	The same of the sa
					Company of	
ARTR	Value	Critical	Road		2000	
ADT Range	145 0.038	150≤ADT≤500	*			
RD Density Access Density	6.6	0.032 8.0	*			
Curve Critical Radius Density	0.567	0.084	*		WGS-84	The state of the s
Edge Risk	1	2 or 3		-	N 48.9058783° W 98.2113717	ISRE
			**			
Describe Proposed Safety	v Improvements					
occorno i ropocca ca ,	mprovements					
	Description	Туре	Cost per mi	Mileage	Cost	Notes - Qualifies for edge line rumble. Curve projects
_	4" Edge Lines	Proactive	\$400	10.6	\$4,240	suggested on other sheets.
	6" Edge Lines	Proactive	\$650	0.0	\$0 \$0	
Ground	Edge Rumble Strip In Wet-Reflective Markings	Proactive Proactive	\$3,500 \$8,500	0.0 0.0	\$0 \$0	
Oround	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0 \$0	
<u>-</u>	6" Center Line	Proactive	\$650	0.0	\$0	_
Project Cost Estimate (att	tach datailed conv			Propos	od Voar o	f Construction
Toject Cost Estimate (att	acii delalled copy)			FTOPOS	eu rear o	Construction
	Federal Funds	\$3,816				
Local Matc	th (10% of Total project cost)	\$424	_			
	Total Project Cost	\$4,240				
NDDOT Central Office On	ly					
	☐ Yes ☐ No F	Reference Number				ID Number
lotes						
						Page: 10
						Segment ID: 55.01 Date: 10/23/2013

Cavalier County Curves

										Crashes								
Curve Count	ID	Corridor	Segment	Start	End	Curve Advisory Sign	Speed Advisory Sign	Chevrons	Total	Total Severe	к а	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Speed Limit	Risk Ranking	Notes
1	06B	6.04	Cavalier 6	Cavalier 13/Hanna CL	Cavalier 17	No	No	No	-	-		950	120	Yes	Yes	High	***	
2	13A	13.01	Cavalier 13	County Line	ND 66	No	No	No	-	-		830	70	Yes	Yes	High	***	
3	13B	13.01	Cavalier 13	County Line	ND 66	No	No	No	-	-		810	70	Yes	Yes	High	***	
4	17C	17.02	Cavalier 17	ND 66/Loma	ND 5	No	No	No	-	-		880	53	Yes	No	High	**	
5	17D	17.02	Cavalier 17	ND 66/Loma	ND 5	No	No	No	-	-		830	53	Yes	No	High	**	
6	039A	39.02	Cavalier 39	ND 66	ND 5	Yes	Yes	No	-	-		1130	290	Yes	No	High	**	
7	039B	39.02	Cavalier 39	ND 66	ND 5	Yes	Yes	No	-	-		1300	290	Yes	No	High	*	
8	55A	55.01	Cavalier 55	ND 1	Cavalier 39	No	No	No	1	-		1000	145	Yes	Yes	High	***	
9	55B	55.01	Cavalier 55	ND 1	Cavalier 39	No	No	No	-	-		920	145	No	No	High	*	
10	55C	55.01	Cavalier 55	ND 1	Cavalier 39	No	No	No	-	-		960	145	No	No	High	*	
11	55D	55.01	Cavalier 55	ND 1	Cavalier 39	No	No	No	-	-		730	145	No	No	High	*	
12	55E	55.01	Cavalier 55	ND 1	Cavalier 39	No	No	No	-	-		1970	145	Yes	No	High	*	
13	55F	55.01	Cavalier 55	ND 1	Cavalier 39	No	No	No	1	-		1200	145	Yes	No	High	**	

	Т	otal
Stars	#	%
****	0	0%
****	0	0%
***	4	31%
**	4	31%
*	5	38%
	0	0%
	13	100%

Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc Ranking Criteria	HIGHWAY SAI					(HSIP)	PROJE	CT APPLI	CATION					
Regency Name: Caravaller Country			Transpor			<u> </u>					<u> </u>			
September Colore	Please attach a locati	ion man(s)	Conta Email	cy Name ct Name: Address:	: Cavalier Cou : Terry Johnst : tjohnsto@nd	unty ton d.gov			lier 13/Ha		ND DOT District		1	
Stand Covarier 139/February CL						inei describi	e your proje	:CI.						
North Delicital Crasifies, 2008-2012 5 years Proximity or High Priority Sign Shoulder Playing Number Proximity or High Priority Sign Shoulder Playing Number Shoulder Playing Sign Shoulder Playing Sign Shoulder Playing Shoulder Playing Sign Shoulder Playing Shoulder Play	End: Caval Facility Type: 2-lane ADT: 120 Road Type Rural	lier 17 e Paved	na CL		S Shou Shou Len	speed Limit: ulder Width: ulder Type: gth (miles):	High 2' Gravel 3.9				Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dr Improvements to Ad Enhancing Emerger	paired Driving Safety Restraints er Driver Safety iving ddress Lane Depa	s for all Occupar	
Advance Waining SignSpeed Advance Waining Si				& System	nic Ranking R									
Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc **Ranking Criteria Curves are selected for project if: Severe Crashes > 0	Curve ID K	A Rad	dius (ft)		on Curve	Visual Trap	Risk Ranking	Existing	Segment + Critical Radius	Improvement Project		Rumble Strip	Horizontal Alignment Warning Sign	
Ranking Criteria Severe Crashes So Criteria Severe Crashes So Criteria Severe Crashes So Criteria Severe Crashes So Criteria Severe Crashes So Criteria Severe Crashes So Criteria So So So So So So So S	06B 0	0	950	120	Yes	Yes	***	-	Х	Chevron	-	-	X	50
Description Type Unit Cost Quantity Total cost Notes - Segment projects suggested on off	Ranking Criteria			Inters	Severe Crashes Radius s ADT section on Curve Visual Trap	Criteria > 0 500 to 1200 350 to 650 Yes		Curves are se - 3 or more ★ - x in Proximi	elected for projers ty or Existing Ch	ct if:	vel road, etc			
Advance Warning Sign/Speed Advisory Plaque Proactive \$3,300 per curve 0 \$0 \$0 Advance Warning Sign/Speed Advisory Plaque Proactive \$500 per curve 1 \$800 per c	Describe Propos	sed Safet	ty Impro	vements										
Project Cost Estimate (attach detailed copy) Federal Funds \$3,690 Local Match (10% of Total project cost) \$410 Total Project Cost \$4,100 NDDOT Central Office Only Project Accepted? Yes No Reference Number ID Number Notes Page: 1 Segment ID: 6.04			Advanc	e Warning	Arrow I Sign/Speed Advis Shoulder Ri	Chevrons Board Only sory Plaque umble Strip	Proactive Proactive Proactive Proactive	\$3,300 \$500 \$800 \$3,000	per curve per curve per mile	1 0 1 .0 miles	\$3,300 \$0 \$800 \$0 \$0	_	nt projects sugg	ested on other
Local Match (10% of Total project cost \$4,100 NODOT Central Office Only Project Accepted? Yes No Reference Number ID Number	Project Cost Est	imate (at	ttach de	tailed co	ру)					Proposed Yo	• '	tion		
Project Accepted?				Local Mato	th (10% of Total p	roject cost)	\$410							
Notes Page: 1 Segment ID: 6.04	NDDOT Central	Office Or	nly											
Page: 1 Segment ID: 6.04		☐ Ye	es	No		Reference	Number				ID Number			
Segment ID: 6.04	INOTES													
Date: 1920/201													Segment ID	

HIGHWAY SAFET' North Dakota Departmen				I (HSIP)	PROJE	CT APPLI	CATION					
SFN 59959 (06-2011)	Ager Conta	ncy Name		unty ton	Cavali	er 13 fro	m County		ID 66 ND DOT District ephone Number		1	
Please attach a location ma	ap(s). You ma	y use addition	onal sheets to fur	-	e your proje	ect.						
Start: County Line End: ND 66 Facility Type: 2-lane ADT: 70 Road Type Rural Paved County Road Cavalier 13	3	Containin	L S Shou Sho Len	Lane Width: Speed Limit: ulder Width: ulder Type: gth (miles): le Installed:	High 2' Gravel 7.0				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depa ecy Medical Capa	for all Occupar	
Describe Current Saf		& System	nic Ranking R									
North Dakota Crashes, 200 Curve ID K A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	
13A 0 0 13B 0 0	830 810	70 70	Yes Yes	Yes Yes	*** ***	-	x x	Chevron Chevron	-	-	X X	45 45
*Curve numbering not cons Ranking Criteria	secutive, as so		Severe Crashes Radius	Criteria > 0 500 to 1200 350 to 650 Yes Yes		Curves are s	elected for projects ty or Existing Ch	ct if:	vel road, etc			
Describe Proposed S	afety Impr	ovements										
	Advan	ce Warning	Arrow Sign/Speed Advis Shoulder R	Board Only	Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 2 0 2 .0 miles .0 miles	Total cost \$6,600 \$0 \$1,600 \$0 \$0 \$0 \$8,200	Notes - Segmer suggested on o		on projects
Project Cost Estimate	e (attach de	etailed co	ру)					Proposed Y	ear of Construct	ion		
		Local Mate	ch (10% of Total p	deral Funds project cost) pject Cost	\$820	-						
NDDOT Central Office	e Only											
Project Accepted? Notes	Yes	No		Reference	e Number				ID Number			
											Page Segment ID Date	

HIGHWAY SAI North Dakota Depa	rtmen				(11317)	I NOJE	OI AFFLI	CATION					
SFN 59959 (06-2011	,	Co Em	ntact Name ail Address	: Cavalier Cou : Terry Johns : tjohnsto@no	ınty ton d.gov			om ND 66		ND 5 ND DOT District ephone Number		1	
Please attach a locati Location Descrip					ther describe	e your proje	ect.						
Start: ND 66 End: ND 5 Facility Type: 2-lane ADT: 53 Road Type Rural County Road Caval	6/Loma			L S Shou Sho Len	ane Width: peed Limit: ulder Width: ulder Type: gth (miles): le Installed:	High 2' Gravel 9.1				SHSP Empha: Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depa ncy Medical Capa	for all Occupar	
Describe Curren			es & Systen	nic Ranking R									
North Dakota Crashe Curve ID K	A	Radius (f		Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius		Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	
17C 0 17D 0	0 0	880 830	53 53	Yes Yes	No No	** **	-	x x	Chevron Chevron	- -	-	x x	45 45
*Curve numbering no <i>Ranking Criteria</i>	-		Inter	Severe Crashes Radius ADT section on Curve Visual Trap	Criteria > 0 500 to 1200 350 to 650 Yes Yes	n further an	Curves are se	elected for projers ty or Existing Ch	ct if:	vel road, etc			
Describe Propos	sed Sa	afety Im	provements	5									
		Adv	ance Warning	Arrow Sign/Speed Advis Shoulder R		Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 2 0 2 .0 miles .0 miles	Total cost \$6,600 \$0 \$1,600 \$0 \$0	_Notes - Segmer suggested on o		on projects
Project Cost Est	imate	(attach	detailed co	ру)					Proposed Y	\$8,200 ear of Construct	ion		
	-		Local Mate	ch (10% of Total p	deral Funds project cost) pject Cost	\$7,380 \$820 \$8,200	-						
NDDOT Central	Office												
Project Accepted? Notes	<u></u>	Yes	No		Reference	Number				ID Number			
												Page Segment ID Date	

SFN 59959 (06-2011												
)			Curves	on Ca	valier 39	from ND	66 to ND	5			
	C	ontact Name	e: Cavalier Cou e: Terry Johnst e: tjohnsto@nd	nty on					ND DOT District ephone Number		1	
Please attach a locat Location Descrip				her describe	your proje	ect.						
		ior Cornairii	· ·							sis Area (check al	II that apply)	
Start: ND 66 End: ND 5 Facility Type: 2-lane ADT: 290 Road Type Rural County Road Caval	Paved		Sp Shoul Shou Leng	ane Width: 1 peed Limit: I lder Width: 1 llder Type: I gth (miles): 9 e Installed: I	High 1' Paved 9.1				Reduce Alcohol Imp Increase the Use of Younger Driver/Old Curb Aggressive Dr Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving ddress Lane Depa ncy Medical Capa	arture Crashes	
Describe Curren		ıes & Syster	nic Ranking Re									
North Dakota Crashe Curve ID K	s, 2008-2012 A Radius	(ft) ADT	Intersection on Curve	5 y Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
039A 0 039B 0	0 1130 0 1300		Yes Yes	No No	**	-	X -	Chevron -	-	-	-	-
*Curve numbering no Ranking Criteria	t consecutive, a	as some curves										
			Severe Crashes Radius 5	Criteria > 0 500 to 1200 350 to 650 Yes Yes	further an	Curves are se	elected for projers ty or Existing Ch	ect if:	vel road, etc			
Describe Propos	ed Safety In	Intel	Severe Crashes Radius 5 ADT : rsection on Curve Visual Trap	Criteria > 0 500 to 1200 350 to 650 Yes	further an	Curves are so - 3 or more ★ - x in Proximi	elected for projers ty or Existing Ch	ect if:	vel road, etc			
Describe Propos	·	Inter	Severe Crashes Radius 5 ADT : rection on Curve Visual Trap S Arrow E Sign/Speed Advis Shoulder Ru	Criteria > 0 500 to 1200 350 to 650 Yes Yes Obscription Chevrons Board Only ory Plaque	Type Proactive Proactive Proactive Proactive	Curves are si - 3 or more * - x in Proximi - within Critical Unit Cost \$3,300 \$500 \$800	per curve	ect if:	Total cost \$3,300 \$0 \$0 \$0 \$0 \$0 \$0	_Notes - Segmer suggested on o		on projects
Describe Propos	Ac	Internation of the state of the	Severe Crashes Radius 5 ADT : resection on Curve Visual Trap S Arrow E Sign/Speed Adviss Shoulder Ru Should	Criteria > 0 500 to 1200 350 to 650 Yes Yes Oescription Chevrons Board Only ory Plaque umble Strip	Type Proactive Proactive Proactive Proactive	Curves are signary of the control o	per curve	Quantity 1 0 0 0 miles 0 miles	Total cost \$3,300 \$0 \$0 \$0	suggested on o		on projects
·	Ac	nprovement Ivance Warning th detailed co	Severe Crashes Radius 5 ADT : resection on Curve Visual Trap S Arrow E Sign/Speed Advis Shoulder Ru Should DDY) Fed ch (10% of Total pi	Criteria > 0 500 to 1200 350 to 650 Yes Yes Description Chevrons Soard Only ory Plaque umble Strip der Paving eral Funds	Type Proactive Proactive Proactive Proactive \$2,970 \$330	Curves are signary of the control o	per curve	Quantity 1 0 0 0 miles 0 miles	Total cost \$3,300 \$0 \$0 \$0 \$0 \$0	suggested on o		on projects
Project Cost Est	Acim ate (attac i	nprovement Ivance Warning th detailed co	Severe Crashes Radius 5 ADT : resection on Curve Visual Trap S Arrow E Sign/Speed Advis Shoulder Ru Should DDY) Fed ch (10% of Total pi	Criteria > 0 500 to 1200 350 to 650 Yes Yes Description Chevrons Board Only ory Plaque umble Strip der Paving eral Funds roject cost)	Type Proactive Proactive Proactive Proactive \$2,970 \$330	Curves are signary of the control o	per curve	Quantity 1 0 0 0 miles 0 miles	Total cost \$3,300 \$0 \$0 \$0 \$0 \$0	suggested on o		on projects
Project Cost Est NDDOT Central Project Accepted?	Acim ate (attac i	nprovement Ivance Warning th detailed co	Severe Crashes Radius 5 ADT : resection on Curve Visual Trap S Arrow E Sign/Speed Advis Shoulder Ru Should DDY) Fed ch (10% of Total pi	Criteria > 0 500 to 1200 350 to 650 Yes Yes Description Chevrons Board Only ory Plaque umble Strip der Paving eral Funds roject cost)	Type Proactive Proactive Proactive Proactive \$2,970 \$330 \$3,300	Curves are signary of the control o	per curve	Quantity 1 0 0 0 miles .0 miles	Total cost \$3,300 \$0 \$0 \$0 \$0 \$0	suggested on o		on projects
Project Cost Est	Actimate (attac	Interprovement Ivance Warning th detailed co	Severe Crashes Radius 5 ADT : resection on Curve Visual Trap S Arrow E Sign/Speed Advis Shoulder Ru Should DDY) Fed ch (10% of Total pi	Criteria > 0 500 to 1200 350 to 650 Yes Yes Description Chevrons Board Only ory Plaque Imble Strip der Paving eral Funds roject cost) ject Cost	Type Proactive Proactive Proactive Proactive \$2,970 \$330 \$3,300	Curves are signary of the control o	per curve	Quantity 1 0 0 0 miles 0 miles	Total cost \$3,300 \$0 \$0 \$0 \$0 \$3,300 Gear of Construct	suggested on o		on projects

Curves on Cavalier 55 from ND Agency Name: Cavalier County Contact Name: Terry Johnston Email Address: tjohnsto@nd.gov Please attach a location map(s). You may use additional sheets to further describe your project.		r 39 ND DOT District							
Please attach a location man(s). You may use additional sheets to further describe your project		ephone Number		1					
Location Description (Corridor Containing Curves)									
Start: ND 1 End: Cavalier 39 Facility Type: 2-lane ADT: 145 Road Type Rural Paved County Road Cavalier 55 Lane Width: 12' Speed Limit: High Shoulder Width: 1' Shoulder Width: 1' Shoulder Type: Paved Length (miles): 10.6 Rumble Installed: No	Speed Limit: High Shoulder Width: 1' Shoulder Type: Paved Length (miles): 10.6 Rumble Installed: No Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Curb Aggressive Driving Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase St								
Describe Current Safety Issues & Systemic Ranking Review									
North Dakota Crashes, 2008-2012 5 years Proximity or High Priorit Intersection Visual Risk Existing Segment - Curve ID K A Radius (ft) ADT on Curve Trap Ranking Chevrons Critical Radi	Improvement us Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sigr					
55A 0 0 1000 145	Chevron Chevron Chevron Chevron	:	- - -	x x x x	50 50 50 45				
55F 0 0 1200 145 Yes No ** x x	Chevron		-	-	-				
*Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radio *Ranking Criteria*	us, located on a gra	evel road, etc							
Criteria Severe Crashes > 0 Radius 500 to 1200 ADT 350 to 650 Intersection on Curve Yes Visual Trap Yes Curves are selected for pro - 3 or more ★s - x in Proximity or Existing - within Critical Radius									
Describe Proposed Safety Improvements									
Advance Warning Sign/Speed Advisory Plaque Shoulder Rumble Strip Shoulder Paving Type Unit Cost \$3,300 per curve \$500 per curve \$800 per curve \$3,000 per mile	Quantity 5 0 4 .0 miles .0 miles	Total cost \$16,500 \$0 \$3,200 \$0 \$0	Notes - Segme sheets.	nt projects sugg	gested on other				
Project Cost Estimate (attach detailed copy)	Proposed Y	\$19,700 'ear of Construct	tion						
Federal Funds \$17,730 Local Match (10% of Total project cost) \$1,970 Total Project Cost \$19,700									
NDDOT Central Office Only									
Project Accepted?		ID Number							
				Page Segment II Date					

Cavalier County Summary of Rural Intersection Projects

Page	Intersection ID	Description	Risk Ranking	Close Median	Install Street Lights	Signs & Markings	Project Cost (\$)
1	6.02	Cavalier 6 and ND 20 (80th Ave) North	***	-	-	х	\$1,150
2	26.01	Cavalier 26 and ND 1	***	Х	-	Х	\$28,700
3	6.07	Cavalier 6 and ND 1	**	-	-	Х	\$1,150
4	13.03	Cavalier 13 and ND 66 (East)	**	-	-	Х	\$3,000
5	13.04	Cavalier 13 and ND 66 (West)	**	-	-	Х	\$2,800
6	17.04	Cavalier 17 and ND 66 (West)	**	-	-	Х	\$3,250
7	17.05	Cavalier 17 and ND 5	**	-	-	Х	\$3,700
8	39.02	Cavalier 39 and ND 5	**	-	Х	Х	\$9,000
9	45.01	Cavalier 45 and ND 66 (west)	**	-	-	Х	\$2,550
				1	1	10	\$55,300

Cavalier County Rural Intersection Listing

Int #	Intersection Description	Skew	On/Near Curve	Development	RR Xing	ADT	Previous STOP (>5mi)	Total Crashes	Cross Product ADT >100,000	Cra	sh Cost
6.01	Cavalier 6 and ND 20 (80th Ave) South	No	No	No	No	172	No	0	No	\$	-
6.02	Cavalier 6 and ND 20 (80th Ave) North	Yes	Yes	No	No	100	Yes	0	No	\$	-
6.03	Cavalier 6 and Cavalier 13	No	No	No	No	213	Yes	0	No	\$	-
6.04	Cavalier 6 and 108th Street	No	No	No	No	140	Yes	0	No	\$	-
6.05	Cavalier 6 and Cavalier 17	No	No	No	No	205	Yes	0	No	\$	-
6.06	Cavalier 6 and Cavalier 23	No	No	No	No	95	Yes	0	No	\$	-
6.07	Cavalier 6 and ND 1	No	No	No	No	265	Yes	1	No	\$	824,000
12.01	Cavalier 12 and ND 20	No	No	No	No	288	Yes	0	No	\$	-
12.02	Cavalier 12 and Cavalier 13	No	No	No	No	85	Yes	0	No	\$	-
13.01	NOT WITH COUNTY ROAD	No	Yes	No	No	86	0	0	No	\$	-
13.02	NOT WITH COUNTY ROAD	No	Yes	No	No	85	0	0	No	\$	-
13.03	Cavalier 13 and ND 66 (East)	No	No	No	Yes	315	Yes	0	No	\$	
13.04	Cavalier 13 and ND 66 (West)	No	No	No	Yes	320	Yes	0	No	\$	-
13.05	Cavalier 13 and ND 5	No	No	No	No	643	Yes	0	No	\$	
17.01	NOT WITH COUNTY ROAD	No	Yes	No	No	37	0	0	No	\$	
17.02	NOT WITH COUNTY ROAD	No	Yes	No	No	35	0	0	No	\$	-
17.03	Cavalier 17 and ND 66 (East)	No	No	No	No	253	Yes	0	No	\$	
17.04	Cavalier 17 and ND 66 (West)	No	No	No	Yes	265	Yes	0	No	\$	-
17.05		No	No	No	No	915	Yes	0	Yes	\$	-
23.01		No	No	No	No	1005	Yes	0	No	\$	-
24.01	Cavalier 24 and Cavalier 39	No	No	No	No	435	Yes	0	No	\$	-
24.02	Cavalier 24 and Cavalier 45	No	No	No	No	54	Yes	0	No	\$	-
	Cavalier 24 (87th Street) and Cavalier 24 (23rd Ave)	No	No	No	No	54	No	0	No	\$	-
24.04		No	No	No	No	44	No	1	No	\$	12,000
26.01		Yes	Yes	No	No	765	Yes	0	No	\$	-
26.02		No	No	No	No	243	No	0	No	\$	-
26.03		No	No	No	No	13	Yes	0	No	\$	-
33.01	Cavalier 33 and ND 66	No	No	No	No	417	Yes	0	No	\$	-
	Cavalier 33 and ND 5	No	No	No	No	1155	Yes	0	No	\$	-
	Cavalier 33 and Cavalier 55	No	No	No	No	110	Yes	0	No	\$	-
39.01		No	No	No	No	693	Yes	0	No	\$	-
	Cavalier 39 and ND 5	No	No	No	No	1030	Yes	0	Yes	\$	-
39.03	Cavalier 39 and Cavalier 55	No	No	No	No	187	Yes	0	No	\$	-
45.01	Cavalier 45 and ND 66 (west)	Yes	No	No	No	58	Yes	0	No	\$	-
	Cavalier 45 and ND 66 (east)	No	No	No	No	0	Yes	0	No	\$	-
	Cavalier 45 and ND 5	No	No	No	No	0	Yes	0	No	\$	-
55.01		No	No	No	No	473	Yes	0	No	\$	-
	Cavalier 503 and ND 66	No	No	No	No	375	No	0	No	\$	-
	Cavalier 506 and ND 5	No	No	No	No	365	No	0	No	\$	-
	Cavalier 507 and ND 1	No	No	No	No	987	No	0	No	\$	-
	Cavalier 508 and ND 1	No	No	No	No	729	No	0	No	\$	-
510.01	Cavalier 510 and ND 1	No	No	No	No	563	No	0	No	\$	-

Cavalier County Rural Intersection Prioritization

Rank	Int#	Intersection Description	Ske	On/Nea Curve	Development RR Xin	Previous STOP (>5m	Total i) Crashes	Cross Product ADT >100,000	Priority	Cra	ash Cost
1	6.02	Cavalier 6 and ND 20 (80th Ave) North	*	*		*			***	\$	_
2	26.01	Cavalier 26 and ND 1	*	*		*			***	\$	-
3	6.07	Cavalier 6 and ND 1				*	*		**	\$	824,000
4	13.03	Cavalier 13 and ND 66 (East)			*	*			**	\$	-
5	13.04	Cavalier 13 and ND 66 (West)			*	*			**	\$	-
6	17.04	Cavalier 17 and ND 66 (West)			*	*			**	\$	-
7	17.05	Cavalier 17 and ND 5				*		*	**	\$	-
8	39.02	Cavalier 39 and ND 5				*		*	**	\$	-
9	45.01	Cavalier 45 and ND 66 (west)	*			*			**	\$	-
10	24.04	Cavalier 24 (23rd Ave) and Cavalier 24 (88th Street)					*		*	\$	12,000
11	6.03	Cavalier 6 and Cavalier 13				*			*	\$	-
12	6.04	Cavalier 6 and 108th Street				*			*	\$	-
13	6.05	Cavalier 6 and Cavalier 17				*			*	\$	-
14	6.06	Cavalier 6 and Cavalier 23				*			*	\$	-
15	12.01	Cavalier 12 and ND 20				*			*	\$	-
16	12.02	Cavalier 12 and Cavalier 13				*			*	\$	-
17	13.01	NOT WITH COUNTY ROAD		*					*	\$	-
18	13.02	NOT WITH COUNTY ROAD		*					*	\$	-
19	13.05	Cavalier 13 and ND 5				*			*	\$	-
20	17.01	NOT WITH COUNTY ROAD		*					*	\$	-
21	17.02	NOT WITH COUNTY ROAD		*					*	\$	-
22	17.03	Cavalier 17 and ND 66 (East)				*			*	\$	-
23	23.01	Cavalier 23 and ND 5				*			*	\$	-
24	24.01	Cavalier 24 and Cavalier 39				*			*	\$	-
25	24.02	Cavalier 24 and Cavalier 45				*			*	\$	-
26	26.03	Cavalier 26 and Cavalier 503				*			*	\$	-
27	33.01	Cavalier 33 and ND 66				*			*	\$	-
28	33.02	Cavalier 33 and ND 5				*			*	\$	-
29	33.03	Cavalier 33 and Cavalier 55				*			*	\$	-
30	39.01	Cavalier 39 and ND 66				*			*	\$	-
31	39.03	Cavalier 39 and Cavalier 55				*			*	\$	-
32	45.02	Cavalier 45 and ND 66 (east)				*			*	\$	-
33	45.03	Cavalier 45 and ND 5				*			*	\$	-
34	55.01	Cavalier 55 and ND 1				*			*	\$	-
35	6.01	Cavalier 6 and ND 20 (80th Ave) South							1	\$	-
36	24.03	Cavalier 24 (87th Street) and Cavalier 24 (23rd Ave)								\$	-
37	26.02	Cavalier 26 and Cavalier 502								\$	-
38	503	Cavalier 503 and ND 66								\$	-
39	506	Cavalier 506 and ND 5								\$	-
40	507	Cavalier 507 and ND 1								\$	-
41	508.01	Cavalier 508 and ND 1								\$	-
42	510	Cavalier 510 and ND 1								\$	-
	Totals	Total Star % That Gets Sta		-	0 3 0% 7%	29 69%	2 5%	2 5%			

				Total Stars	•	U	U	U	20	_	_	
	Totals			% That Gets Star	7%	14%	0%	7%	69%	5%	5%	
		#	%									
***	***	0	0%		Stars							
**	***	0	0%	Skew -	If inter	section is sl	kewed at an	angle of 20	degrees or	greater.		
*1	***	0	0%	On/Near Curve -	If inter	section is o	n or within 1	,000 feet of	curve.			
7	***	0	0%	Development -	If inter	section aeri	al shows a	commercial	development	t with acce	ss near interse	ction.
	***	2	5%	RR Xing -	If inter	section has	a railroad o	rossing on a	any approach	within 500) feet.	
	**	7	17%	Previous STOP (>5 mi) -	If vehice	cles approa	ching the st	op control h	ave not had	a previous	stop along the	roadway within 5 miles
	*	25	60%	Total Crashes -	If inter	section has	at least 1 c	rash.				
	-	8	19%	Cross Product ADT -	If inter	section has	an ADT cro	ss product :	>100,000			
		42	100%		•							

HIGHWAY SAFETY IN North Dakota Department of			M (HSIP) PROJE	CT APPLIC	CATION		
SFN 59959 (06-2011)							
			er 6 and ND 20	•	•		
Agency Name: Contact Name:					DOT Distric	t: 3 r: 701-256-216	84
Email Address:	-			relepii	one number	1. 701-230-210	, i
Please attach a location map(s).			urther describe your proj	ect			
Location Description							
						mphasis Area (ch hol Impaired Drivi	eck all that apply)
Configuration:	Т	Traffic Control Device:	Thru Stop			•	straints for all Occupants
Configuration (2):		Street Lights:				er/Older Driver Sa	afety
Urban/Rural:	Rural Cavalier	Flashers: Major Entering ADT:			Curb Aggress		e Departure Crashes
Entering ADT:		Minor Entering ADT:					Capabilities to Increase Survivat
				✓	Improve Inter	section Safety	
Describe Current Safety	Issues & :	Systemic Ranking	Review				
North Dakota Crashes, 2008 - 20		-	years				
	Total	Angle	K+A				
Crashes		0	0	-			0
Rate (per MVM)	0.0	0.0	0.0	_ [4.5	1
						100	
						1	
	Value	Critical	Risk Ranking	_			A VALUE
Skew		Yes	*		1559		
On/Near Curve		Yes	*			ALCOHOL: N	THE REAL PROPERTY.
Development Near RR Crossing		Yes Yes			1	12 14 11 11	
Distance from previous STOP		Yes	*		1000		1
Volume Cross Product		≥ 100,000			A STE		Water State of the last of the
Total Crashes	0	>0	***	- 1			
Describe Proposed Safet	y Improve	ements					
	Description			Units	Cost	Notes -	
	Roundabout	. , ,	per intersection	0	\$0.00		
Mainline Dynamic W	onal Median	. ,	per intersection per intersection	0	\$0.00 \$0.00		
	ose Median		per intersection	0	\$0.00		
	Street Lights		per street light	0	\$0.00		
	e Stop Sign unction Sign		per sign per sign	1 1	\$350.00 \$350.00		
Upgrade Stop			per sign	1	\$450.00		
Upgrade Stop Ahe			per marking	0	\$0.00		
Upgrad Review Sigr	de Stop Bar	·	per marking per intersection	0	\$0.00 \$0.00		
			•	-	\$1,150.00	<u> </u>	
Signs and Markings and Street L Project Cost Estimate (at			er of minor legs associat		section. Year of Con	sctruction	
Project Cost Estimate (at	lacii uela	пец сору)		Froposea	real of Con	istruction	
	deral Funds	\$1,035					
Local Match (10% of Total p		\$115 \$4.450	-				
Total Pic	oject Cost	\$1,150					
NDDOT Central Office Or	nly						
Project Accepted?	Yes	□No	Reference Number			ID Number	
Notes							
							Page: 1
						Inte	rsection ID: 6.02
							Date: 10/23/2013

HIGHWAY SAFETY IMPF	OVEM	ENT DDOCDA	M (HSID) DDO IE	CT ADDI I	CATION			
North Dakota Department of Tran			WI (HSIP) PROJE	CI APPLIC	JATION			
SFN 59959 (06-2011)	<u> </u>		Cavalier 26 a	and ND 4				
Agency Name: Ca	valior Co	Num t y	Cavaller 26 a		DOT District	. 2		
Contact Name: Te						. 3 : 701-256-216	1	
Email Address: tjo	-			. 0.001.	0110 114111201		•	
Please attach a location map(s). You			urther describe your proj	ject				
Location Description								
Configuration: X Configuration (2): Divi Urban/Rural: Rur County: Cav Entering ADT: 765	ided ral valier	raffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 640		Reduce Alcoholncrease the U Younger Drive Curb Aggressi Improvements	er/Older Driver Sat ive Driving to Address Lane nergency Medical	g traints for all Occupants	ırvivabilit
Describe Current Safety Issu	ies & Sy:	stemic Ranking	Review					
North Dakota Crashes, 2008 - 2012		5	years					
-	Total	Angle	K+A					
Crashes	0	0	0	- 1				
Rate (per MVM)	0.0	0.0	0.0	_		1 1 1		
						- 1		
	/alue	Critical	Risk Ranking					
	Yes	Yes	*			1//5	F-11-18-17-17	
	Yes No	Yes Yes	*					
	No	Yes			e e		AVIN BULLAN	
	Yes	Yes	*			E ALL		
Volume Cross Product Total Crashes	No 0	≥ 100,000 >0				1		
Total Clasiles			***	- 1		A PARTIE	3	
D " D 10111								
Describe Proposed Safety In	nprovem	ents						
	cription	Unit Cost		Units	Cost	Notes -		
	ndabout		per intersection	0	\$0.00			
Directional Mainline Dynamic Warni			per intersection per intersection	0 0	\$0.00 \$0.00			
	Median	. ,	per intersection	1	\$25,000.00			
Installing Stree			per street light	0	\$0.00			
Upgrade Sto Upgrade Junctio			per sign per sign	2 2	\$700.00 \$700.00			
Upgrade Stop Ahe			per sign	2	\$900.00			
Upgrade Stop Ahead N	0		per marking	2	\$900.00			
Upgrade S	•		per marking per intersection	2 0	\$500.00			
Review Signs ar	10 051	\$2,450	perintersection	0	\$0.00 \$28,700.00	_		
Signs and Markings and Street Light			er of minor legs associa		section.			
Project Cost Estimate (attac	h detaile	d copy)		Proposed	Year of Cons	struction		
Federa	l Eunde	\$25,830						
Local Match (10% of Total proje		\$2,870						
Total Projec		\$28,700	<u>-</u>					
NDDOT O								
NDDOT Central Office Only Project Accepted?	Yes □ N	No	Reference Number			ID Number		
Notes	<u>e2</u>	10	reference Number			ID Number		
							Page: 2	
						Inters	section ID: 26.01 Date: 10/23/2013	

	PAM (USID) DDO IEC	T ADDI IC	NOITA-			
HIGHWAY SAFETY IMPROVEMENT PROG North Dakota Department of Transportation Programming		APPLIC	ATION			
SFN 59959 (06-2011)	Cavalier 6 and	4 ND 4				
Agency Name: Cavalier County	Cavaller 6 and		DOT District	: 3		
Contact Name: Terry Johnston				: 701-256-21	61	
Email Address: tjohnsto@nd.gov		•				
Please attach a location map(s). You may use additional sheet	s to further describe your project	t				
Location Description			CUCD Er	anhasis Area (al	heck all that apply)	
• , ,	ghts: No hers: No ADT: 243		Reduce Alcoh Increase the U Younger Drive Curb Aggress Improvements	ol Impaired Driv Use of Safety Re er/Older Driver S ive Driving to Address Lan nergency Medica	ing estraints for all Occupants	urvivabilit
Describe Current Safety Issues & Systemic Rank						
North Dakota Crashes, 2008 - 2012	5 years					
Total Angle	K+A				484	
Crashes 1 0 Rate (per MVM) 2.1 0.0	1 2.1			10/1/		
Rate (per MVM) 2.1 0.0	2.1	6				
			A SAM			
Value Critical	Risk Ranking		THE STATE OF THE S			
Skew No Yes	Nisk Natikitig		No. of			
On/Near Curve No Yes		Ç				
Development No Yes Near RR Crossing No Yes						
Distance from previous STOP Yes Yes	*		4 7 11	4/// 19		
Volume Cross Product No ≥ 100,000						
Total Crashes 1 >0	<u>*</u> **					
Describe Proposed Safety Improvements						
Description Unit Cost		Units	Cost	Notes -		
Roundabout \$1,000	,000 per intersection	0	\$0.00	_		
	,000 per intersection ,000 per intersection	0 0	\$0.00 \$0.00			
, ,	,000 per intersection	0	\$0.00			
	,000 per street light	0	\$0.00			
	3350 per sign 3350 per sign	1 1	\$350.00 \$350.00			
	6450 per sign	1	\$450.00			
	3450 per marking	0	\$0.00			
	3250 per marking 3450 per intersection	0 0	\$0.00 \$0.00			
Novious digital and do 1	, roo por interession		\$1,150.00	_		
Signs and Markings and Street Light project costs vary by the r Project Cost Estimate (attach detailed copy)				atruation		
Project Cost Estimate (attach detailed copy)		Proposed	Year of Con	Struction		
Federal Funds \$1,035						
Local Match (10% of Total project cost) \$115 Total Project Cost \$1,150						
10ta 1 10ject 00st						
NDDOT Central Office Only						
Project Accepted?	Reference Number			ID Number		
Notes						
					Page: 3	
				Inte	ersection ID: 6.07 Date: 10/23/2013	

HIGHWAY SAFETY IN North Dakota Department of SFN 59959 (06-2011)			.M (HSIP) PROJE	CT APPLIC	ATION		
		Ca	avalier 13 and	ND 66 (Eas	st)		
Agency Name:	Cavalier				OT District	t: 3	
Contact Name:	Terry Joh	nnston		Telepho	ne Number	r: 701-256-2161	
Email Address:							
Please attach a location map(s).	You may us	se additional sheets to f	urther describe your proje	ect			
Location Description					01100.5		
						mphasis Area (check all that apply) hol Impaired Driving	
Configuration:	Χ	Traffic Control Device:	Thru Stop	_		Use of Safety Restraints for all Occupants	
Configuration (2):		Street Lights:	•			er/Older Driver Safety	
Urban/Rural:		Flashers:			Curb Aggress		
	Cavalier	Major Entering ADT:				s to Address Lane Departure Crashes	abilit.
Entering ADT:	313	Minor Entering ADT:	. 42			mergency Medical Capabilities to Increase Survi- section Safety	ability
Describe Organic Cafata	1	Cuatamia Danlina	Daview		•	·	
Describe Current Safety I North Dakota Crashes, 2008 - 20			years				
Crashes	Total 0	Angle 0	K+A 0	-	and I		
Rate (per MVM)		0.0	0.0				
, v				_			
) =		
	Value	Onitional	Diels Deelsies				
Skew	Value No	Critical Yes	Risk Ranking	-			
On/Near Curve		Yes		24	SET 1. 15	W Ton Street	
Development	No	Yes		17			
Near RR Crossing		Yes	*			NO THE RESERVE	
Distance from previous STOP		Yes	*	h			
Volume Cross Product Total Crashes		≥ 100,000 >0					
Total orasinos			**			《 图》	
Describe Proposed Safet	y Improv	omonts					
Describe i Toposeu Salet	y iiiipi ove	ments					
	Description			Units	Cost	Notes - Segment and curve projects suggeste	d on
	Roundabout onal Median		per intersection	0 0	\$0.00	other sheets.	
Mainline Dynamic W		. ,	per intersection per intersection	0	\$0.00 \$0.00		
	ose Median		per intersection	0	\$0.00		
	Street Lights		per street light	0	\$0.00		
	e Stop Sign		per sign	2	\$700.00		
Upgrade Ju Upgrade Stop	Inction Sign		per sign per sign	2 2	\$700.00 \$900.00		
Upgrade Stop Ahe			per marking	1	\$450.00		
Upgrad	de Stop Bar	\$250	per marking	1	\$250.00		
Review Sign	ns and CST	\$2,450	per intersection	0	\$0.00 \$3,000.00	<u> </u>	
Signs and Markings and Street L	_ight project	costs vary by the numb	er of minor legs associat	ed with the inters	. ,		
Project Cost Estimate (at	tach deta	iled copy)		Proposed \	ear of Con	nstruction	
Fed	deral Funds	\$2,700					
Local Match (10% of Total p		\$300	_				
Total Pro	oject Cost	\$3,000					
NDDOT Central Office Or	ılv						
Project Accepted?		□No	Reference Number			ID Number	
Notes						·	_
						Page: 4	
						Intersection ID: 13.03 Date: 10/23/2013	

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HIGHWAY SAFETY IN North Dakota Department of SFN 59959 (06-2011)			.M (HSIP) PROJE(CI APPLIC	CATION		
,		Ca	valier 13 and N	ID 66 (We	est)		
Agency Name:					DOT Distric		
Contact Name:	-			Teleph	one Numbe	r: <mark>701-256-2</mark> 1	161
Email Address:							
Please attach a location map(s).	You may us	se additional sheets to f	urther describe your proje	ct			
Location Description					CHCD E	mphasia Araa (a	heck all that apply)
						niphasis Area (d hol Impaired Driv	11 27
Configuration:	Χ	Traffic Control Device:	Thru Stop			•	estraints for all Occupants
Configuration (2):		Street Lights:				er/Older Driver S	Safety
Urban/Rural:		Flashers:			Curb Aggress		5
Entering ADT:	Cavalier	Major Entering ADT: Minor Entering ADT:					ne Departure Crashes al Capabilities to Increase Surviva
Littering AD1.	320	Willion Entering ADT.	10			section Safety	ai Capabililles to ilicrease Surviva
Describe Current Safety	lecune &	Systemic Panking	Poviow				
North Dakota Crashes, 2008 - 2		-	years				
	T-1-1	Accelo	1Z . A				
Crashes	Total 0	Angle 0	K+A 0	- 1			
Rate (per MVM)		0.0	0.0		Section 1		
				_			
				- 1			
	Value	Critical	Diak Donking				
Skew	Value No	Critical Yes	Risk Ranking	-			
On/Near Curve		Yes			1	40	
Development	No	Yes		- 1			
Near RR Crossing		Yes	*				
Distance from previous STOP		Yes	*				
Volume Cross Product Total Crashes		≥ 100,000 >0		- 1			(4.2 Table)
Total oracino			**	- 1		7	
Describe Proposed Safet	v Improve	omonts					
Describe i roposca Garet	y improve	monts					
	Description			Units	Cost	Notes	
	Roundabout onal Median		per intersection per intersection	0 0	\$0.00 \$0.00		
Mainline Dynamic W		. ,	per intersection	0	\$0.00		
	ose Median		per intersection	Ö	\$0.00		
	Street Lights		per street light	0	\$0.00		
	e Stop Sign unction Sign		per sign	2 2	\$700.00 \$700.00		
Upgrade Stop			per sign per sign	2	\$900.00		
Upgrade Stop Ahe			per marking	0	\$0.00		
	de Stop Bar	•	per marking	2	\$500.00		
Review Sign	ns and CST	\$2,450	per intersection	0	\$0.00 \$2,800.00	<u> </u>	
Signs and Markings and Street L			er of minor legs associate		section.		
Project Cost Estimate (at	tach deta	iled copy)		Proposed	Year of Con	struction	
Fed	deral Funds	\$2,520					
Local Match (10% of Total p		\$280	_				
Total Pro	oject Cost	\$2,800					
NDDOT Central Office Or	ıly						
Project Accepted?	Yes	□No	Reference Number			ID Number	
Notes							
							Page: 5
						Int	ersection ID: 13.04
						IIII	Date: 10/23/2013

HIGHWAY SAFETY IMI North Dakota Department of TI SFN 59959 (06-2011)			M (HSIP) PROJE	CT APPLIC	ATION		
(**************************************		Са	valier 17 and N	ID 66 (We	st)		
Agency Name: 0	Cavalier (OT District	t: 3	
Contact Name: 1	Terry Joh	ınston		Telepho	ne Number	r: 701-256-2161	
Email Address: t							
Please attach a location map(s). Y	ou may us	e additional sheets to fu	urther describe your proje	ect			
Location Description				T	CHODE		II that analys
						mphasis Area (check a nol Impaired Driving	ii that appiy)
Configuration: >	(Traffic Control Device:	Thru Stop			Jse of Safety Restraint	s for all Occupants
Configuration (2): L	Jndivided	Street Lights:	No			er/Older Driver Safety	
Urban/Rural: F		Flashers:			Curb Aggress		
County: 0 Entering ADT: 2		Major Entering ADT: Minor Entering ADT:				s to Address Lane Dep	arture Crashes abilities to Increase Survivability
Entening AD1. 2	.00	Millor Entening ADT.	31			nergency inedical Cap section Safety	abilities to increase Survivability
			_		•		
Describe Current Safety Is North Dakota Crashes, 2008 - 201			Review years				
Notti Dakota Ciasiles, 2006 - 20	12	3	years				
	Total	Angle	K+A	_	PHE	1 1/5/8/8	THE STATE OF THE S
Crashes	0 0.0	0 0.0	0 0.0			To be the same	11/2 12/2/2/2
Rate (per MVM)	0.0	0.0	0.0	_		THE RESERVE	
	Value	Critical	Risk Ranking	_		No.	Civa
Skew On/Near Curve	No No	Yes Yes		_		alama (area)	
Development	No	Yes		K	*		
Near RR Crossing	Yes	Yes	*		144	State House	Market Market
Distance from previous STOP	Yes	Yes	*				Market Mills
Volume Cross Product	No	≥ 100,000			f.		
Total Crashes	0	>0	**	- 8			
				_			
Describe Proposed Safety	Improve	ments					
D	escription	Unit Cost		Units	Cost	Notes - Segment an	d curve projects suggested on
	oundabout		per intersection	0	\$0.00	other sheets.	a darvo projecto daggeotoa en
	al Median		per intersection	0	\$0.00		
Mainline Dynamic Wa			per intersection	0	\$0.00		
Installing Str	se Median		per intersection per street light	0 0	\$0.00 \$0.00		
	Stop Sign		per sign	2	\$700.00		
Upgrade Jun			per sign	2	\$700.00		
Upgrade Stop Al Upgrade Stop Ahea			per sign per marking	2 1	\$900.00		
. •	Stop Bar	·	per marking per marking	2	\$450.00 \$500.00		
Review Signs	•	•	per intersection	0	\$0.00		
					\$3,250.00		
Signs and Markings and Street Lig Project Cost Estimate (atta			er of minor legs associate	Proposed Y		estruction	
Froject Cost Estimate (atta	icii uetai	ieu copy)		Froposed i	ear or con	istruction	
Fede	eral Funds	\$2,925					
Local Match (10% of Total pro		\$325	_				
Total Proj	ect Cost	\$3,250					
NDDOT Central Office Onl	V						
		□No	Reference Number			ID Number	
Notes					-	<u></u>	
							Page: 6
							on ID: 17.04 Date: 10/23/2013

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HIGHWAY SAFETY IN North Dakota Department of SFN 59959 (06-2011)			.M (HSIP) PROJEC	SI APPLIO	CATION		
			Cavalier 17 ar	nd ND 5			
Agency Name:					DOT District	-	
Contact Name:	-			Teleph	one Number	: 701-256-21	61
Email Address:							
Please attach a location map(s).	You may us	se additional sheets to for	urther describe your projec	<u>t </u>			
Location Description				l	CHCD En	anhasis Aros (sh	neck all that apply)
						ol Impaired Drivi	11 27
Configuration:	Χ	Traffic Control Device:	Thru Stop			•	straints for all Occupants
Configuration (2):		Street Lights:			0	r/Older Driver S	afety
Urban/Rural:		Flashers:			Curb Aggressi		. Demonstrate Consider
Entering ADT:	Cavalier	Major Entering ADT: Minor Entering ADT:					e Departure Crashes al Capabilities to Increase Survivability
Littering AD1.	313	Willion Entering ADT.	140		Improve Inters		a Capabilities to increase Survivability
Describe Current Safety	lecues 8	Systemia Banking	Poviow				
North Dakota Crashes, 2008 - 20			years				
Crashes	Total 0	Angle 0	K+A 0	- [A	
Rate (per MVM)		0.0	0.0			(C) (a)	U
, , , , , , , , , , , , , , , , , , ,			<u> </u>	-			and a
						12, 8	A THE REAL PROPERTY.
Skew	Value No	Critical Yes	Risk Ranking	-		1000	Company of the Compan
On/Near Curve		Yes			The same	- 5 TU III	AND SOUTH
Development		Yes				No.	A STATE OF
Near RR Crossing		Yes			9		7
Distance from previous STOP		Yes	*				
Volume Cross Product		≥ 100,000	*				8 000
Total Crashes	0	>0	**	-	lace.		The second second
D " D 10 ()							
Describe Proposed Safet	y improve	ements					
	Description			Units	Cost	_Notes - Segme	ent and curve projects suggested on
	Roundabout		per intersection	0	\$0.00	other sheets	
Direction Mainline Dynamic W	onal Median	*,	per intersection	0 0	\$0.00 \$0.00		
•	ose Median		per intersection per intersection	0	\$0.00 \$0.00		
Installing S	Street Lights	\$6,000	per street light	Ö	\$0.00		
Upgrade	e Stop Šign	\$350	per sign	2	\$700.00		
	inction Sign		per sign	2	\$700.00		
Upgrade Stop A Upgrade Stop Ahe			per sign per marking	2 2	\$900.00 \$900.00		
. •	de Stop Bar		per marking	2	\$500.00		
Review Sigr	•	•	per intersection	0	\$0.00		
Signs and Markings and Street L	ight project	t coata wary by the numb	or of minor logo accognito	d with the inte	\$3,700.00		
Signs and Markings and Street L Project Cost Estimate (at			er or minor legs associated		Year of Cons	struction	
,							
	deral Funds						
Local Match (10% of Total p	oject Cost		=				
	•						
NDDOT Central Office Or			In ()	1		Tip N	
Project Accepted? Notes	Yes	No	Reference Number			ID Number	
							Page: 7
						Inte	ersection ID: 17.05
							Date: 10/23/2013

LUGUNAN GAFETVIN		MENT BRADE	M (UOID) DDO IE	OT 4 DDI 1	0.471011		
HIGHWAY SAFETY IN North Dakota Department of SFN 59959 (06-2011)			M (HSIP) PROJE	CI APPLI	CATION		
,			Cavalier 39 a	nd ND 5			
Agency Name: Contact Name:	Terry Jol	hnston			DOT District one Number	: 3 : 701-256-21	61
Email Address: Please attach a location map(s).			urther describe your proje	oct			
Location Description	Tou may a		araner decerned year proje				
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Cavalier	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 863		Reduce Alcoh Increase the L Younger Drive Curb Aggressi Improvements	ol Impaired Drivi Jse of Safety Restr/Older Driver Sive Driving to Address Landergency Medica	straints for all Occupants
Describe Current Safety							
North Dakota Crashes, 2008 - 20)12	5	years				
Crashes Rate (per MVM)		Angle 0 0.0	K+A 0 0.0	-	hier.		utolyka
Skew On/Near Curve		Critical Yes Yes	Risk Ranking	_			
Development Near RR Crossing	No	Yes Yes				-	
Distance from previous STOP Volume Cross Product Total Crashes	Yes	Yes ≥ 100,000 >0	* *				
Total Grashes			**	-	1	9157	
Describe Proposed Safet	v Improv	ements					
	<i>yp</i>						
	Description Roundabout		per intersection	Units 0	Cost \$0.00	Notes - Segme other sheets	ent and curve projects suggested on
	nal Median		per intersection	0	\$0.00	Other sheets	
Mainline Dynamic W			per intersection	0	\$0.00		
	ose Median Street Lights		per intersection per street light	0 1	\$0.00 \$6,000.00		
Upgrade	e Stop Šign	\$350	per sign	2	\$700.00		
Upgrade Ju Upgrade Stop			per sign	2	\$700.00		
Upgrade Stop Ahe			per sign per marking	2 1	\$900.00 \$450.00		
	de Stop Bar		per marking	1	\$250.00		
Review Sigr	is and CST	\$2,450	per intersection	0	\$0.00	_	
Signs and Markings and Street L	iaht proiect	costs vary by the numb	er of minor legs associate	ed with the inte	\$9,000.00 rsection.		
Project Cost Estimate (at					Year of Con	struction	
_		*					
Fed Local Match (10% of Total p	deral Funds	\$8,100 \$900					
	ject Cost		-				
	•	. ,					
NDDOT Central Office Or			ID-france Novel			IID N	
Project Accepted? Notes	Yes	No	Reference Number			ID Number	
							Page: 8
						Inte	rsection ID: 39.02 Date: 10/23/2013

LUGUNAY OA EETY II	100.0\/E	MENT DDGGD4	M (UOID) DD O IE	OT ABBLIO	ATION		
HIGHWAY SAFETY IN North Dakota Department of SFN 59959 (06-2011)			.M (HSIP) PROJE	CT APPLIC	ATION		
,		Ca	avalier 45 and I	ND 66 (we	st)		
Agency Name:	Cavalier			•	OOT Distric	t: 3	
Contact Name:	Terry Joh	nnston		Telepho	one Numbe	r: 701-256-21	61
Email Address:							
Please attach a location map(s).	You may us	se additional sheets to f	urther describe your proje	ect			
Location Description							
							heck all that apply)
Configuration:	X	Traffic Control Device:	Thru Ston			nol Impaired Driv	estraints for all Occupants
Configuration (2):		Street Lights:	•			er/Older Driver S	
Űrban/Rural:		Flashers:			Curb Aggress		•
-	Cavalier	Major Entering ADT:					ne Departure Crashes
Entering ADT:	58	Minor Entering ADT:	29				al Capabilities to Increase Survivabilit
					improve mier	section Safety	
Describe Current Safety	Issues & :	Systemic Ranking	Review				
North Dakota Crashes, 2008 - 2		-	years				
	Total	Analo	IZ . A	_			
Crashes	Total 0	Angle 0	K+A 0	- 1		13	
Rate (per MVM)		0.0	0.0				and the same
Y ,				_		3	Part Control of the C
							1
		.				Y	
Skew	Value Yes	Critical Yes	Risk Ranking ★	_	-		
On/Near Curve		Yes	^		Ministran	-	2
Development		Yes				100	Part I have been seen as a second
Near RR Crossing		Yes				13. 1	
Distance from previous STOP	Yes	Yes	*			TO THE	4
Volume Cross Product		≥ 100,000		*		15/6/19	E
Total Crashes	0	>0	**	-		750	
			^ ^				
Describe Proposed Safet	y Improve	ements					
	Description	Unit Cost		Units	Cost	Notes -	
	Roundabout		per intersection	0	\$0.00	_	
	onal Median	+,	per intersection	0	\$0.00		
Mainline Dynamic W	arning Signose Median		per intersection	0	\$0.00		
_	Street Lights	+ -,	per intersection per street light	0	\$0.00 \$0.00		
	e Stop Sign		per sign	2	\$700.00		
	unction Sign	\$350	per sign	2	\$700.00		
Upgrade Stop			per sign	2	\$900.00		
Upgrade Stop Ahe	ead Marking de Stop Bar		per marking per marking	0 1	\$0.00 \$250.00		
Review Sign	•	•	per intersection	0	\$0.00		
			F		\$2,550.00	<u> </u>	
Signs and Markings and Street L			er of minor legs associate				
Project Cost Estimate (at	tach deta	iled copy)		Proposed `	Year of Con	struction	
For	deral Funds	\$2,295					
Local Match (10% of Total p		\$255					
	ject Cost		-				
NDDOT Central Office Or			In			Tie vi	
Project Accepted? Notes	Yes	□ No	Reference Number			ID Number	
Notes							
							_
						laste	Page: 9
						inte	ersection ID: 45.01 Date: 10/23/2013

23 USC 409 NDDOT Reserves All Objections

Nelson County

Nelson County Rural Segment Projects

Page	Corridor ID	Route #	Start	End	Length	Risk Ranking	4" Edge Line	Project Cost (\$)
1	35.02	Nelson 35 0	Intersection with ND 15	Intersection with 34th St	9.9	***	9.9	\$3,960.00
2	19.01	Nelson 19 0	Intersection with ND 1	Intersection with US Hwy 2	5.4	***	10.8	\$4,320.00
3	35.03	Nelson 35 0	Intersection with Nelson 4	Intersection with South St	8.1	**	8.1	\$3,240.00
4	1.03	Nelson 1 0	Intersection with ND 35	East Border of Nelson County	10.0	**	10.0	\$4,000.00
5	4.03	Nelson 4 0	Intersection with ND 1	Intersection with Nelson 35 on 113t	8.1	**	8.1	\$3,240.00
6	5.02	Nelson 5 0	Rail road crossing south of city of Kloten	Intersection with ND 32	2.1	**	2.1	\$840.00
7	23.03	Nelson 23 0	Intersection with ND 15	Intersection with 31th St	4.0	**	4.0	\$1,600.00
8	4.02	Nelson 4A 0	Intersection with Pavilion Rd	Intersection with ND 1	2.1	**	2.1	\$840.00
9	18.02	Nelson 18 0	Intersection with 112th Ave	Intersection with ND 15	0.5	**	0.5	\$200.00
10	4.04	Nelson 4 0	Intersection with Nelson 35 on 113th Ave	Intersection with ND 32	8.0	*	8.0	\$3,200.00
11	4.05	Nelson 4 0	Intersection with ND 32	Intersection with 49th St	5.0	*	5.0	\$2,000.00
12	1.02	Nelson 1 0	Intersection with ND 1	Intersection with ND 35	10.0	*	10.0	\$4,000.00

78.6 \$31,440.00

Nelson County

Rural Segment Listing

*High Priority Segments Project Sheet Page Number

Project Sheet Page*	Corridor	Route	Start	End	Length (miles)	Lane Departure Crashes	ADT	Lane Departure Density	Access Density	Curves w/ Critical Radius / Mile	Edge Risk Assesment
12	1.02	Nelson 1	Intersection with ND 1	Intersection with ND 35	10.0	1	86	0.02	6.8	0.00	2
4	1.03	Nelson 1	Intersection with ND 35	East Border of Nelson County	10.0	0	129	0.00	5.5	0.10	2
8	4.02	Nelson 4A	Intersection with Pavilion Rd	Intersection with ND 1	2.1	0	105	0.00	11.2	1.95	1
5	4.03	Nelson 4	Intersection with ND 1	Intersection with Nelson 35 on 1	8.1	0	80	0.00	7.0	0.61	2
10	4.04	Nelson 4	Intersection with Nelson 35 on 113th Ave	Intersection with ND 32	8.0	0	105	0.00	5.4	0.00	2
11	4.05	Nelson 4	Intersection with ND 32	Intersection with 49th St	5.0	0	95	0.00	7.0	0.00	2
6	5.02	Nelson 5	Rail road crossing south of city of Kloten	Intersection with ND 32	2.1	0	50	0.00	12.1	0.00	2
	14.01	Nelson 14	Intersection with 51st Street	Intersection with 1st Ave	0.5	0	270	0.00	6.5	0.00	1
9	18.02	Nelson 18	Intersection with 112th Ave	Intersection with ND 15	0.5	0	75	0.00	27.6	2.12	1
2	19.01	Nelson 19	Intersection with ND 1	Intersection with US Hwy 2	5.4	1	76	0.04	5.8	0.19	2
	23.02	Nelson 23	Intersection with 20th St	Intersection with ND 15	7.0	0	111	0.00	6.3	0.00	1
7	23.03	Nelson 23	Intersection with ND 15	Intersection with 31th St	4.0	0	374	0.00	16.5	0.00	1
1	35.02	Nelson 35	Intersection with ND 15	Intersection with 34th St	9.9	0	184	0.00	7.4	0.20	2
3	35.03	Nelson 35	Intersection with Nelson 4	Intersection with South St	8.1	1	171	0.02	6.6	0.00	2
		•			80.7	3					

Edge Risk Legend

1 Risky' - NEITHER shoulder or good clear zone 2 Either a shoulder OR good clear zone

3 BOTH shoulder and a good clear zone

Critical ADT Range - Lane Departure 150 500

Critical Radius Lane Curves Access Total 3 Total Mileage 80.7 80.7 80.7 Years 5 Average Density (Total/Mile) 0.01 0.01

Nelson County Rural Segment Prioritization - Lane Departure Priority

														Tiebrea	akers
#	Corridor	Route	#	Start	End	Length	ADT	ADT Range	Lane Departure Density	Access Density	Curve Critical Radius Density	Edge Risk	Totals	Edge Risk	ADT
1	35.02	Nelson 35	0	Intersection with ND 15	Intersection with 34th St	9.9	184	*			*	*	***	2	184
2	19.01	Nelson 19	0	Intersection with ND 1	Intersection with US Hwy 2	5.4	76		*		*	*	***	2	76
3	35.03	Nelson 35	0	Intersection with Nelson 4	Intersection with South St	8.1	171	*				*	**	2	171
4	1.03	Nelson 1	0	Intersection with ND 35	East Border of Nelson County	10.0	129				*	*	**	2	129
5	4.03	Nelson 4	0	Intersection with ND 1	Intersection with Nelson 35 on 113th /	8.1	80				*	*	**	2	80
6	5.02	Nelson 5	0	Rail road crossing south of city of Kloten	Intersection with ND 32	2.1	50			*		*	**	2	50
7	23.03	Nelson 23	0	Intersection with ND 15	Intersection with 31th St	4.0	374	*		*			**	1	374
8	4.02	Nelson 4A	0	Intersection with Pavilion Rd	Intersection with ND 1	2.1	105			*	*		**	1	105
9	18.02	Nelson 18	0	Intersection with 112th Ave	Intersection with ND 15	0.5	75			*	*		**	1	75
10	4.04	Nelson 4	0	Intersection with Nelson 35 on 113th Ave	Intersection with ND 32	8.0	105					*	*	2	105
11	4.05	Nelson 4	0	Intersection with ND 32	Intersection with 49th St	5.0	95					*	*	2	95
12	1.02	Nelson 1	0	Intersection with ND 1	Intersection with ND 35	10.0	86	·				*	*	2	86
13	14.01	Nelson 14	0	Intersection with 51st Street	Intersection with 1st Ave	0.5	270	*					*	1	270
14	23.02	Nelson 23	0	Intersection with 20th St	Intersection with ND 15	7.0	111							1	111
					_	Tota	l Stars	. 4	1	4	6	9			
					•	% That Ge	ts Star	29%	7%	29%	43%	64%			

	#	%	Mileage	%
****	0	0%	0.0	0%
****	0	0%	0.0	0%
***	2	14%	15.3	19%
**	7	50%	34.9	43%
*	4	29%	23.5	29%
	1	7%	7.0	9%
	14	100%	80.7	100%

Stars

ADT Range - If segment has an ADT in the range of most at risk ADT based on Northeast totals. (150 < ADT < 500)

Lane Departure Density - If segment has higher lane departure density than the Northeast average (0.032).

Access Density If segment has access density than the nationwide average (8).

Curve Critical Radius Density - If segment has higher density of curves with critical radius than the Northeast average (0.084).

Edge Risk Assessment - Edge risk of 2 or 3, based on assessment of roadway edge and clear zone.

HIGHWAY SAFETY IN North Dakota Department of SFN 59959 (06-2011)			PROJECT	APPL	ICATION	l		
	Nelson 35 from In	tersection v	vith ND 1	15 to I	ntersec	tion with	34th St	
Agency Name:			ND DOT I					
Contact Name:	-	T	elephone N			1433		
	nelsonhwy@gondtc.coi		elephone iv	iuiiibei.	101-322-	1733		
Please attach a location map(s).			your project					
ocation Description	Tou may use additional sheet	is to further describe	your project					
ocation bescription					S	HSP Emphasis	Area (check all that a	anly)
Start:	Intersection with ND 15	Lane Width:	12'			ohol Impaired I	·	эргу)
	Intersection with 34th St	Speed Limit				•	Restraints for all Occ	upants
Facility Type:	2-Lane	Shoulder Width:	: 2'			iver/Older Drive		
ADT:		Shoulder Type:	: Paved		Curb Aggre	ssive Driving		
	Rural Paved	Length (miles)		☑ [Lane Departure Crash	
County Road	Nelson 35	Rumble Installed	: No				edical Capabilities to In	crease Survivability
					improve int	ersection Safet	ty .	
Describe Current Safety	lssues & Systemic Rank	kina Review						
lorth Dakota Crashes, 2008 - 20			years					
,			-		Mediane	ROW	39730.JPG	CHZMHILL
	Total	Road Dept	K+A		C Reputh			
Crashes	2	0	0		100,000			A second
Density (per mile per year)	0.04	0.00	0.00					14 A. P.
Rate (per MVM)	0.60	0.00	0.00					and the same
								1000
	Value	Critical	Road		Francisco A			
ADT Range	184	150≤ADT≤500	*			-		
RD Density	0.000	0.032				1 1 1		
Access Density	7.4	8.0						
Curve Critical Radius Density	0.202	0.084	*		WGS-84			
Edge Risk	2	2 or 3	*		N 47.8357233 W 98.1612200			SRF

Describe Proposed Safet	v Improvements							
	<i>yp</i> . • · • · · · · · · · · · · · · · · ·							
	Description	Type	Cost per mi	Mileage	Cost	Notes - Quali	fies for edge line rumb	le. Intersection projects
-	4" Edge Lines	Proactive	\$400	9.9	\$3,960	suggested on	-	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	6" Edge Lines	Proactive	\$650	0.0	\$0			
_	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0			
Groun	d In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0 ©0			
	Center Line Rumble Strip 6" Center Line	Proactive Proactive	\$3,000 \$650	0.0 0.0	\$0 \$0			
-	O Genter Line	1 TOGOTIVE	ΨΟΟΟ	0.0	ΨΟ	_		
Project Cost Estimate (at	tach detailed copy)			Propos	ed Year o	f Construct	ion	
	Federal Funds	\$3,564						
Local Mate	ch (10% of Total project cost)	\$396 \$3 .060	_					
	Total Project Cost	\$3,960						
NDDOT Central Office Or	nlv							
		Reference Number	Τ			ID Number		
lotes			2				!	
						_	Page:	1
						Se	egment ID: Date:	35.02 10/23/2013

HIGHWAY SAFETY IM North Dakota Department of T SFN 59959 (06-2011)			PROJECT	APPLI	ICATION	l		
	Nelson 19 from Int	ersection w	ith ND 1	to Inte	ersecti	on with U	IS Hwy 2	
Agency Name: I			ND DOT I			• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · ·	
Contact Name: I	-	T	elephone N			1133		
			siepriorie iv	ullibel.	701-322-	4433		
	nelsonhwy@gondtc.com							
Please attach a location map(s).	You may use additional sheets	to further describe	your project					
Location Description						1100 5	A (1 1 1	
Ctort. I	ntersection with ND 1	Lane Width:	10'			HSP Emphasis ohol Impaired [i that apply)
	ntersection with US Hwy 2	Speed Limit:				e Use of Safety	J	all Occupants
Facility Type: 2	•	Shoulder Width:	-			iver/Older Drive		an Occupants
ADT: 7		Shoulder Type:				ssive Driving	,	
Road Type F	Rural Paved	Length (miles):	5.4	\checkmark	Improveme	nts to Address	Lane Departure	e Crashes
County Road N	Nelson 19	Rumble Installed:	: No					es to Increase Survivability
					Improve Int	ersection Safet	у	
Describe Current Sefety I	ocupa & Systemia Bank	ing Poviou						
Describe Current Safety I North Dakota Crashes, 2008 - 20			years					
- 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000	/ 1 <u>C</u>	5	years		Western	BOAN	51000_F2	CHOMHEL
	Total	Road Dept	K+A		42n4 street			
Crashes	1	1	0					
Density (per mile per year)	0.04	0.04	0.00					
Rate (per MVM)	1.34	1.34	0.00					
					1000	Name of the last		
	Value	Critical	Road		200			
ADT Range	76	150≤ADT≤500	rtoda		NO.	The second		
RD Density	0.037	0.032	*					
Access Density	5.8	8.0						
Curve Critical Radius Density	0.186	0.084	*		WGS-84			
Edge Risk	2	2 or 3	*		N 48 0211333			SRF
			***			,		JIN
Describe Proposed Safet	v Improvoments							
Describe i roposed Salet	y improvements							
	Description	Type	Cost per mi	Mileage	Cost	Notes - Edge	line cost includ	les 4" centerline marking.
-	4" Edge Lines	Proactive	\$400	10.8	\$4,320			ted on other sheets.
	6" Edge Lines	Proactive	\$650	0.0	\$0		.,	
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0			
Ground	d In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0			
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0			
-	6" Center Line	Proactive	\$650	0.0	\$0	_		
Project Cost Estimate (at	tach detailed copy)			Propos	ed Year o	f Constructi	ion	
rojoci cooi zaminio (uni	anon dolumod copy)			Порос		. concurac	-	
	Federal Funds	\$3,888						
Local Mate	th (10% of Total project cost)	\$432	_					
	Total Project Cost	\$4,320						
NDDOT Central Office On	also.							
		eference Number	Ι			ID Number	I	
lotes	Lifes Lino IV	.ororonoo rvambor				12 I tallibol	ļ	
							Page:	2
						Se	egment ID:	19.01
							Date:	10/23/2013

						_		
HIGHWAY SAFETY IN North Dakota Department of T SFN 59959 (06-2011)			PROJECT	APPLI	CATION	I		
	elson 35 from Inter	rsection wit	h Nelsor	1 4 to 1	Interse	ction with	h South St	
Agency Name: I			ND DOT I					
Contact Name:	_	To	elephone N			4433		
	nelsonhwy@gondtc.com		5.5p55					
Please attach a location map(s).			vour project					
Location Description	Tournay add additional onlock	o to futifier decembe	your project					
					S	HSP Emphasis	Area (check all the	at apply)
Start: I	ntersection with Nelson 4	Lane Width:	: 12'			ohol Impaired I	•	11 77
	ntersection with South St	Speed Limit:	U				Restraints for all 0	Occupants
Facility Type: 2		Shoulder Width:				iver/Older Drive	er Safety	
ADT: 1		Shoulder Type:				ssive Driving	Lana Danamura O	
Road Type I County Road I		Length (miles): Rumble Installed					Lane Departure Co	o Increase Survivability
County Road I	1010011 00	rambio motanoa	. 110			ersection Safet		o morodoo odrvivability
Describe Current Safety I	ssues & Systemic Rank	rina Review						
lorth Dakota Crashes, 2008 - 20			years					
			-		Nelson	RIM	enson-JPG	CH29MHILL
	Total	Road Dept	K+A		115th Ave North			
Crashes	3	1	1					
Density (per mile per year) Rate (per MVM)	0.07 1.19	0.02 0.40	0.02 0.40					
itale (per invini)	1.19	0.40	0.40					
								COLUMN TO SERVICE STATE OF THE PERSON NAMED IN COLUMN TO SERVICE STATE OF THE PERSON NAMED STATE OF THE PERSON NAMED STATE OF THE PERSON NAMED STATE OF THE PERSON NAM
					March 18			2.50
	Value	Critical	Road					
ADT Range	171	150≤ADT≤500	*		700	+ +		
RD Density	0.025	0.032				-		
Access Density	6.6	8.0						
Curve Critical Radius Density	0.000 2	0.084	_		WGS-84 N 47.9267583			
Edge Risk		2 or 3	**		W 98.1185350	•		SRF
Describe Proposed Safet	y Improvements							
	B. contaction	T	0 1	N. 4"1	01			
-	Description 4" Edge Lines	Type Proactive	Cost per mi \$400	8.1	Cost \$3,240			imble. Intersection projects
	6" Edge Lines	Proactive	\$ 4 00 \$650	0.0	\$3,240 \$0	suggested on	other sneets	
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0 \$0			
Ground	In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0			
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0			
_	6" Center Line	Proactive	\$650	0.0	\$0	_		
Project Cost Estimate (at	tach detailed conv)			Proposi	ed Year o	f Construct	ion	
roject cost Estimate (ut	adon detaned dopy)			Пороз	ca rear c	, construct	1011	
	Federal Funds	\$2,916						
Local Mate	th (10% of Total project cost)	\$324	_					
	Total Project Cost	\$3,240						
NDDOT Central Office On	dv							
		Reference Number				ID Number		
lotes						-	·ļ	
							D	
						0,	Page: egment ID:	3 35.03
						36	Date:	10/23/2013

SFN 59959 (06-2011)			NIE SE			(1)	
		ection with				er of Nelson County	
Agency Name:	-		ND DOT I	District:	3/6		
Contact Name:	Richard Urvand	T	elephone N	lumber:	701-322-	-4433	
Email Address:	nelsonhwy@gondtc.com						
Please attach a location map(s).	You may use additional sheets	to further describe	e your project				
Location Description							
						SHSP Emphasis Area (check all that apply)	
	Intersection with ND 35	Lane Width				lcohol Impaired Driving	
	East Border of Nelson County	Speed Limi	•			he Use of Safety Restraints for all Occupants	
Facility Type: ADT:		Shoulder Width				Oriver/Older Driver Safety ressive Driving	
Road Type		Shoulder Type Length (miles				ents to Address Lane Departure Crashes	
County Road		Rumble Installed	,			g Emergency Medical Capabilities to Increase Survival	oility
						ntersection Safety	,
						•	
Describe Current Safety		ng Review					
North Dakota Crashes, 2008 - 20	012		5 years				
		5			Malaon Malao Street	PEMISOCIELPS CHEMICA	
Onestee	Total	Road Dept	K+A 0		West		
Crashes	2	0	-				
Density (per mile per year) Rate (per MVM)	0.04 0.85	0.00 0.00	0.00 0.00				
rtate (per ivivivi)	0.00	0.00	0.00				
	Value	Critical	Road		-		
ADT Range	129	150≤ADT≤500					
RD Density	0.000	0.032					
Access Density	5.5	8.0					
Curve Critical Radius Density	0.100	0.084	*		WGS-84		
Edge Risk	2	2 or 3	*		W 98.076531	SRF	
			^^				
Describe Proposed Safet	v Improvements						
	,						
	Description	Туре	Cost per mi	Mileage	Cost	Notes -	
-	4" Edge Lines	Proactive	\$400	10.0	\$4,000		
	6" Edge Lines	Proactive	\$650	0.0	\$0		
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0		
Groun	d In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0		
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0 \$0		
-	6" Center Line	Proactive	\$650	0.0	\$0	_	
Project Cost Estimate (at	tach detailed copy)			Propos	ed Year o	of Construction	
110,001 0001 =0	шон шошнош серу)			Порос	00 700 0		
	Federal Funds	\$3,600					
Local Mate	ch (10% of Total project cost)	\$400					
	Total Project Cost	\$4,000					
NDDOT Central Office Or		, , ,				UD N	
Project Accepted? Notes	Yes No Re	eference Number	_			ID Number	
Notes							
						Page: 4	
						Segment ID: 4	
						Date: 10/23/2013	

HIGHWAY SAFETY IM	PROVEMENT PROG	DAM (USID)	DDO IECT	ADDI	ICATION				
North Dakota Department of T SFN 59959 (06-2011)			PROJECT	AFFL	ICATION				
Nelson	4 from Intersectio	n with ND	1 to Inter	section	on with	Nelson 3	5 on 113	th Ave	
Agency Name: N	Nelson County		ND DOT	District:	3/6				
Contact Name: F	Richard Urvand	٦	Telephone N	lumber:	701-322-4	1433			
Email Address: r	nelsonhwy@gondtc.com	1	-						
Please attach a location map(s).	You may use additional sheets	to further describe	e your project						
ocation Description									
]		•	Area (check al	I that apply)	
	ntersection with ND 1 ntersection with Nelson 35 or	Lane Width				ohol Impaired I		-11 0	
Facility Type: 2		Speed Limi Shoulder Width	•			iver/Older Driv	Restraints for er Safety	ali Occupants	
ADT: 8		Shoulder Type			•	ssive Driving			
Road Type F		Length (miles	s): 8.1	V	Improveme	nts to Address	Lane Departure		
County Road N	lelson 4	Rumble Installe	d: No			Emergency Me ersection Safet		es to Increase Survivabil	ity
]	improve inc	ersection date	.y		
Describe Current Safety Is		ng Review							
lorth Dakota Crashes, 2008 - 20	12		5 years					-	
	Total	Road Dept	K+A		9400 SC	F2100	31021.JPG	CH2MHILL	
Crashes	0	0	0		East.				
Density (per mile per year)	0.00	0.00	0.00						
Rate (per MVM)	0.00	0.00	0.00						
					2				
	Value	Critical	Road						
ADT Range	80	150≤ADT≤500				+	10.0	March of the san	
RD Density	0.000	0.032						n	
Access Density Curve Critical Radius Density	7.0 0.614	8.0 0.084	+					No. of London	
Edge Risk	2	2 or 3	*		N 47 9040333	1		CDE	
J			**		W 98 2694800	6.5		SKF	
Describe Proposed Safety	/ Improvements								
_	Description	Type Proactive	Cost per mi		Cost	_	e and intersection	on projects suggested or	other
	4" Edge Lines 6" Edge Lines	Proactive	\$400 \$650	8.1 0.0	\$3,240 \$0	sheets.			
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0 \$0				
Ground	In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0				
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0				
_	6" Center Line	Proactive	\$650	0.0	\$0	_			
Project Cost Estimate (att	ach detailed copy)			Propos	ed Year o	f Construct	ion		
	Federal Funds	\$2,916							
Local Matcl	h (10% of Total project cost)	\$324							
Eoodi Mator	Total Project Cost	\$3,240	_						
	•								
NDDOT Central Office On Project Accepted?		eference Number				ID Number	T		
lotes	_ res _ lvo re	elerence (valiber				ID Number			
							Page:	5	
						Se	egment ID:	4.03	
							Date:	10/23/2013	

North Dakota Department of	IPROVEMENT PROGIT	RAM (HSIP)	PROJECT	APPL	ICATION	l		
SFN 59959 (06-2011)	F (many Dail mand an		-41 6 - 14-	(1/	1 - 4 4 -		(!!)	L ND 00
	5 from Rail road cr	ossing sou				Interse	ection wit	n ND 32
Agency Name:	•		ND DOT I					
Contact Name:	Richard Urvand	Т	elephone N	lumber:	701-322-	4433		
Email Address:	nelsonhwy@gondtc.com							
Please attach a location map(s).	You may use additional sheets	to further describe	your project					
ocation Description								
•					S	HSP Emphas	sis Area (check	all that apply)
Start:	Rail road crossing south of cit	Lane Width	: 12'		Reduce Alc	ohol Impaire	d Driving	,
End:	Intersection with ND 32	Speed Limit	:: High		Increase th	e Use of Safe	ety Restraints fo	or all Occupants
Facility Type:	2-Lane	Shoulder Width	: 2'			river/Older D		
ADT:		Shoulder Type				essive Driving		
	Rural Paved	Length (miles)					ss Lane Departu	
County Road	Nelson 5	Rumble Installed	l: No					ities to Increase Survivability
					Improve Int	ersection Sa	fety	
Dosoribo Current Safety	Issues & Systemia Banki	na Poviow						
North Dakota Crashes, 2008 - 2	Issues & Systemic Ranki		- voore					
voitii Dakuta Grashes, 2008 - 2	UIL	;	5 years		Malara		musosna roo	F-100-101/2
	Total	Road Dept	K+A		C		umstrotteres	CH2MHRLL
Crashes	0	0	0		Resetts			
Density (per mile per year)	0.00	0.00	0.00					The state of the s
Rate (per MVM)	0.00	0.00	0.00					
,								
					-			
	Value	Critical	Road		4			Si 10
ADT Range	50	150≤ADT≤500			24 5. 3000	de w		
RD Density	0.000	0.032				titus titus		
Access Density	12.1	8.0	*		of the state of		AL PRINCIPAL PRI	
Curve Critical Radius Density	0.000	0.084			WGS-84		The same of the sa	
Edge Risk	2	2 or 3	*		N 47 7372950 W 98 0754400			SRF
			**					
Danavila Duamanad Cafat								
Describe Proposed Safet	y improvements							
		_						
-	Description	Type	Cost per mi		Cost	Notes -		
	4" Edge Lines	Proactive	\$400	2.1	\$840			
	6" Edge Lines Edge Rumble Strip	Proactive Proactive	\$650 \$3,500	0.0 0.0	\$0 \$0			
Group	d In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0 \$0			
Cioun	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0 \$0			
	6" Center Line	Proactive	\$650	0.0	\$0			
-					· · · · · · · · · · · · · · · · · · ·	_		
Project Cost Estimate (at	tach detailed copy)			Propos	ed Year o	f Constru	ction	
	Federal Funds	\$756						
Local Mate	ch (10% of Total project cost)	\$84	<u> </u>					
	Total Project Cost	\$840						
UDDOT Combined Office O								
NDDOT Central Office Or Project Accepted?	-	eference Number	1			ID Number		
lotes	Yes No Re	sierence Number	1			ID Number		
10103								
								!
								•
								!
							Dogo:	6
							Page: Segment ID:	5.02
							Date:	10/23/2013

HIGHWAY SAFETY IM North Dakota Department of T SFN 59959 (06-2011)			PROJECT	APPLI	ICATION			
	Nelson 23 from Int	tersection v	vith ND 1	15 to l	ntersec	tion with	31th St	
Agency Name: I			ND DOT I					
Contact Name: I	-	т	elephone N			1433		
	nelsonhwy@gondtc.com		cicpilolic i	uniber.	101 322 -	1400		
Please attach a location map(s).			Vour project					
Location Description	Tou may use additional sheets	to futther describe	your project					
Location Description					CI	ICD Emphasia	Araa (ahaak all th	ot apply)
Stort: I	ntersection with ND 15	Lane Width	. 10'			ohol Impaired [Area (check all the	ат арріу)
	ntersection with 31th St	Speed Limit					Restraints for all	Occupants
Facility Type: 2		Shoulder Width	U			iver/Older Drive		occupants
ADT: 3		Shoulder Type				ssive Driving	,	
Road Type F	Rural Paved	Length (miles)				_	Lane Departure C	rashes
County Road N	Nelson 23	Rumble Installed	: No			Emergency Me ersection Safet		o Increase Survivability
Describe Current Safety I	ssues & Systemic Ranki	ing Review						
lorth Dakota Crashes, 2008 - 20			years					
					Holaon	ROOS	SOUTH AND SOUTH	CHOMBILL
	Total	Road Dept	K+A		E Horth			
Crashes	6	0	0					
Density (per mile per year)	0.30	0.00	0.00					
Rate (per MVM)	2.20	0.00	0.00					
	Value	Critical	Road					when were
ADT Range	Value 374	Critical 150≤ADT≤500	*		and the same of	and the same		The second second
RD Density	0.000	0.032	^		-	100	AND RESIDENCE	Charles Control
Access Density	16.5	8.0	*		_de_			
Curve Critical Radius Density	0.000	0.084			Wee of	6		
Edge Risk	1	2 or 3			N 47-8140533	16		COP
			**		W 98.4399950			SRF
Describe Proposed Safet	y Improvements							
_	Description	Туре	Cost per mi		Cost	_Notes - Qualif	fies for edge line ru	ımble.
	4" Edge Lines	Proactive	\$400	4.0	\$1,600			
	6" Edge Lines	Proactive	\$650	0.0	\$ 0			
Cround	Edge Rumble Strip In Wet-Reflective Markings	Proactive Proactive	\$3,500 \$8,500	0.0 0.0	\$0 \$0			
Ground	Center Line Rumble Strip	Proactive	\$3.000	0.0	\$0 \$0			
	6" Center Line	Proactive	\$650	0.0	\$ 0			
_			*		* -	_		
Project Cost Estimate (at	tach detailed copy)			Propos	ed Year o	f Constructi	ion	
	Federal Funds	\$1,440						
Local Mato	h (10% of Total project cost)	\$160	_					
	Total Project Cost	\$1,600						
NDDOT Central Office On	lv							
		eference Number	T			ID Number	I	
lotes	Lies Live In	orororioo rvambor	 			IB Italiiboi	ļ	
							Page:	7
						Se	egment ID:	23.03
							Date:	10/23/2013

HIGHWAY SAFETY IM North Dakota Department of T SFN 59959 (06-2011)			PROJECT	APPL	ICATION	I		
	elson 4A from Inte	rsection wi	th Pavili	on Rd	to Inte	rsection	with ND 1	
Agency Name: I			ND DOT I					
Contact Name: I	-	T	elephone N			4433		
	nelsonhwy@gondtc.com		5.5p55					
Please attach a location map(s).			vour project					
Location Description	Tou may doo additional oncote	to futifier december	your project					
					S	HSP Emphasis	Area (check all the	at apply)
Start: I	ntersection with Pavilion Rd	Lane Width:	: 12'			ohol Impaired D		,
	ntersection with ND 1	Speed Limit:	-				Restraints for all (Occupants
Facility Type: 2		Shoulder Width:			-	iver/Older Drive	er Safety	
ADT: 1		Shoulder Type:				ssive Driving	Lana Danartura Ci	raahaa
Road Type F County Road N		Length (miles): Rumble Installed:					Lane Departure Ci dical Canabilities t	o Increase Survivability
County Roda I	TOIGOTT IT	Trumbio motanou.	. 110			ersection Safety		o morodoo odrvivability
Describe Current Safety I	ssues & Systemic Rank	ina Review						
North Dakota Crashes, 2008 - 20			years					
•			•		Websen	7000	90532.JPG	CHZMHILL
	Total	Road Dept	K+A		Boot			Aug 1850
Crashes	0	0	0				200	
Density (per mile per year) Rate (per MVM)	0.00 0.00	0.00 0.00	0.00 0.00					
itale (per inivini)	0.00	0.00	0.00					
	Value	Critical	Road					
ADT Range	105	150≤ADT≤500				-		
RD Density	0.000	0.032					- THEFT	
Access Density	11.2	8.0	*					A local and
Curve Critical Radius Density Edge Risk	1.947 1	0.084 2 or 3	*		WGS-84 N 47 87/50008	- 1		100
Euge Nisk	<u>'</u>	2013	**		W983095450		-	SRF
Describe Proposed Safet	y Improvements							
	Description	Turno	Coat par mi	Miloogo	Cost	Natas Canai		
-	4" Edge Lines	Type Proactive	Cost per mi \$400	2.1	Cost \$840		•	n other segment projects suggested on other sheets.
	6" Edge Lines	Proactive	\$650	0.0	\$0	along Nelson	4. Ourve projects .	suggested on other sneets.
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0			
Ground	In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0			
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0			
_	6" Center Line	Proactive	\$650	0.0	\$0	_		
Project Cost Estimate (at	tach detailed copy)			Propos	ed Year o	f Constructi	ion	
.,							-	
	Federal Funds	\$756						
Local Mate	h (10% of Total project cost)	\$84	_					
	Total Project Cost	\$840						
NDDOT Central Office On	lv							
		deference Number				ID Number		
lotes	•		*			•	•	
							Page:	8
						Se	egment ID:	6 4.02
							Date:	10/23/2013

SFN 59959 (06-2011)	elson 18 from Inte	rsection w	ith 112th	Ave t	o Inter	section with ND 15	
Agency Name:			ND DOT I				
Contact Name: I			elephone N	lumber:	701-322	-4433	
	nelsonhwy@gondtc.con						
Please attach a location map(s). Location Description	You may use additional sneets	s to further describe	your project				
						SHSP Emphasis Area (check all that apply)	
	Intersection with 112th Ave Intersection with ND 15	Lane Width Speed Limi				lcohol Impaired Driving he Use of Safety Restraints for all Occupants	
Facility Type: 2		Shoulder Width				Driver/Older Driver Safety	
ADT: 7	75	Shoulder Type		_		ressive Driving	
Road Type I County Road I		Length (miles) Rumble Installed				ents to Address Lane Departure Crashes g Emergency Medical Capabilities to Increase Survivabili	ty
•					Improve In	ntersection Safety	
Describe Current Safety I	ssues & Svstemic Rank	ina Review					
North Dakota Crashes, 2008 - 20			5 years				
	Total	Road Dept	K+A		Richago G	RIMSOFM JPS OHEMHIL	
Crashes	0	0	0	•	Elos0		
Density (per mile per year)	0.00	0.00 0.00	0.00				
Rate (per MVM)	0.00	0.00	0.00	•			
						400000	
	Value	Critical	Road				
ADT Range	75	150≤ADT≤500	11000	•		and the same of th	
RD Density Access Density	0.000 27.6	0.032 8.0	*		il line	THE STATE OF THE S	
Curve Critical Radius Density	2.124	0.084	*		WGS-84		
Edge Risk	1	2 or 3	**		N 47.759225 W 98.181008	SRF	
			~ ~				
Describe Proposed Safet	y Improvements						
	Description	Type	Cost per mi	Mileage	Cost	Notes - Consider combining with intersection projects	alana
-	4" Edge Lines	Proactive	\$400	0.5	\$200	Nelson 18. Intersection projects suggested on other s	
	6" Edge Lines Edge Rumble Strip	Proactive	\$650	0.0	\$0 \$0		
Ground	d In Wet-Reflective Markings	Proactive Proactive	\$3,500 \$8,500	0.0 0.0	\$0 \$0		
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0 \$0		
-	6" Center Line	Proactive	\$650	0.0	\$0	_	
Project Cost Estimate (at	tach detailed copy)			Propos	ed Year	of Construction	
	Federal Funds	\$180					
Local Mato	ch (10% of Total project cost)	\$20	_				
	Total Project Cost	\$200					
NDDOT Central Office On	nly						
Project Accepted? Notes	☐ Yes ☐ No R	Reference Number				ID Number	
Notes							
						D	
						Page: 9 Segment ID: 18.02	
						Date: 10/23/2013	

HIGHWAY SAFETY IN North Dakota Department of T SFN 59959 (06-2011)			PROJECT	APPL	ICATION	I		
	4 from Intersection	n with Nelso	on 35 on	113th	Ave to	Intersec	tion with	ND 32
Agency Name: I			ND DOT I					
Contact Name:	-	To	elephone N			4433		
	nelsonhwy@gondtc.com		5.5p55					
Please attach a location map(s).			vour project					
Location Description		10 1011101 00001100	у о ш. р. ојоск					
					S	HSP Emphasis	Area (check all	that apply)
Start: I	ntersection with Nelson 35 or	Lane Width:	12'			cohol Impaired [,
End: I	ntersection with ND 32	Speed Limit:	U			e Use of Safety		all Occupants
Facility Type: 2		Shoulder Width:				river/Older Drive	er Safety	
ADT: 1		Shoulder Type:				essive Driving	Lana Danastiina	Crashaa
Road Type I County Road I		Length (miles): Rumble Installed				nts to Address Emergency Me		es to Increase Survivability
County Road I	10.0011	rambio motanoa	. 110			ersection Safet		oo to moroado Garvivabiity
Poscribo Current Safety I	ssues & Systemic Pank	ing Poviow						
Describe Current Safety I North Dakota Crashes, 2008 - 20			years					
2.30.100, 2000 20		Č	,		Neison	FONC	3775LPG	CH2MHILL
	Total	Road Dept	K+A		Seen St East			
Crashes	5	0	0					
Density (per mile per year) Rate (per MVM)	0.13 3.27	0.00 0.00	0.00 0.00					and a
itale (per invini)	3.21	0.00	0.00					
								A STATE OF THE PARTY OF THE PAR
	Value	Critical	Road					
ADT Range	105	150≤ADT≤500			- 3			
RD Density	0.000	0.032					-	
Access Density	5.4	8.0			1	-	The same of	Acres de la constante de la co
Curve Critical Radius Density Edge Risk	0.000 2	0.084 2 or 3	+		WGS-84 N 47 9040367			
Luge Misk		2 01 3	<u>^</u>		W 98.1032133			I SRF
Describe Proposed Safet	y Improvements							
	Description	Туре	Cost per mi	Mileage	Cost	Notes Intere	action projects	augaseted on other shoots
-	4" Edge Lines	Proactive	\$400	8.0	\$3,200	_ Notes - Inters	ection projects	suggested on other sheets.
	6" Edge Lines	Proactive	\$650	0.0	\$0			
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0			
Ground	In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0			
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$ 0			
-	6" Center Line	Proactive	\$650	0.0	\$0	_		
Project Cost Estimate (at	tach detailed copy)			Propos	ed Year o	of Constructi	on	
	Federal Funds	\$2,880						
Local Mato	h (10% of Total project cost) Total Project Cost	\$320	=					
	Total Project Cost	\$3,200						
NDDOT Central Office On	ly							
Project Accepted?		eference Number				ID Number		
lotes	·							
							Page:	10
						Se	gment ID:	4.04
							Date:	10/23/2013

HIGHWAY SAFETY IN North Dakota Department of			PROJECT	APPLI	CATION	I	
SFN 59959 (06-2011)							
	Nelson 4 from Int	ersection w	ith ND 3	2 to In	tersect	tion with 49th St	
Agency Name:	Nelson County		ND DOT	District:	3/6		
Contact Name:	Richard Urvand	To	elephone N	umber:	701-322-4	1433	
Email Address:	nelsonhwy@gondtc.con	n	•				
Please attach a location map(s).	, ,		your project				
Location Description							
·			I		SI	HSP Emphasis Area (check all that apply	')
Start:	Intersection with ND 32	Lane Width:	12'		Reduce Alc	ohol Impaired Driving	
	Intersection with 49th St	Speed Limit	-			e Use of Safety Restraints for all Occupa	nts
Facility Type:		Shoulder Width:				iver/Older Driver Safety	
ADT:		Shoulder Type		_		ssive Driving	
Road Type County Road		Length (miles) Rumble Installed				nts to Address Lane Departure Crashes Emergency Medical Capabilities to Increa	ase Survivahility
County Road	140,0011 4	ramble installed	. 140			ersection Safety	asc our vivability
Describe Current Safety I	ssues & Systemic Rank	ing Review					
North Dakota Crashes, 2008 - 20			years				
	_				Risiaon 9400 CC	RING1672-JP3 CH2	MOREL
	Total	Road Dept	K+A		Boot or		
Crashes	3	0	0				
Density (per mile per year) Rate (per MVM)	0.12	0.00	0.00				
Rate (per MVM)	3.46	0.00	0.00				
	Value	Critical	Road		11		
ADT Range	95	150≤ADT≤500				T + 1-	
RD Density	0.000	0.032					THE SECTION AND ADDRESS OF THE SECTION ADDRESS OF THE SECTION ADDRESS OF THE SECTION AND ADDRESS OF THE SECTION ADDRESS
Access Density	7.0	8.0					(feet)
Curve Critical Radius Density	0.000	0.084			WGS-84		
Edge Risk	2	2 or 3	<u>*</u>		N 47 9041167 W 97 9656683		SRE
			*				
Describe Proposed Safet	v Improvements						
bescribe i roposed Garet	y improvements						
	Description	Type	Cost per mi	Mileane	Cost	Notes - Intersection projects suggested	on other sheets
-	4" Edge Lines	Proactive	\$400	5.0	\$2,000	Notes - intersection projects suggested	on other sneets.
	6" Edge Lines	Proactive	\$650	0.0	\$0		
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0		
Ground	d In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0		
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0		
_	6" Center Line	Proactive	\$650	0.0	\$0	_	
Project Cost Estimate (at	took detailed come)			Dranas	ad Vaar a	f Company action	
Project Cost Estimate (at	таст аетапеа сору)		1	Propos	ed Year O	f Construction	
	Federal Funds	\$1,800					
Local Mate	ch (10% of Total project cost)	\$200					
	Total Project Cost	\$2,000	_				
	,	. , -					
NDDOT Central Office Or	nly						
	☐ Yes ☐ No R	Reference Number				ID Number	
Notes							
						Page:	11
						Segment ID: Date: 10	4.05 /23/2013
						Date. 10,	-5/2010

SFN 59959 (06-2011)	Nelson 1 from Ir	ntersection	with ND	1 to In	tersec	tion with ND 35
Agency Name: Contact Name:	Nelson County		ND DOT I	District:	3/6	
Email Address:	nelsonhwy@gondtc.cor	n	-			
Please attach a location map(s).	You may use additional sheet	s to further describe	e your project			
Location Description						
	86 Rural Paved	Lane Width Speed Limi Shoulder Width Shoulder Type Length (miles Rumble Installed	it: High n: 2' e: Paved): 10.0		Reduce Ald Increase th Younger Di Curb Aggre Improveme Enhancing	HSP Emphasis Area (check all that apply) cohol Impaired Driving the Use of Safety Restraints for all Occupants friver/Older Driver Safety the Driving the the Address Lane Departure Crashes the Emergency Medical Capabilities to Increase Survivability tersection Safety
Describe Current Safety	lssues & Systemic Rank	ing Review				
North Dakota Crashes, 2008 - 20	012		5 years			
					Maison Black German	RIMOSERUIFG CHONNELL
Creahan	Total	Road Dept	K+A		Wast	
Crashes Density (per mile per year)	7 0.14	1 0.02	0 0.00			
Rate (per MVM)	4.45	0.64	0.00			
rate (per mirm)	1.10	0.01	0.00			
	Value	Critical	Road			
ADT Range	86	150≤ADT≤500			- steel + A	Comment of the last of the las
RD Density	0.020	0.032				
Access Density	6.8	8.0				
Curve Critical Radius Density	0.000	0.084			WGS-84	
Edge Risk	2	2 or 3	*		N 48.1516933 W 98.3049817	SRF
			*			
Describe Proposed Safet	y Improvements					
	Description	Turno	Cost por mi	Mileage	Cost	Nata
-	4" Edge Lines	Type Proactive	Cost per mi \$400	10.0	\$4,000	Notes -
	6" Edge Lines	Proactive	\$650	0.0	\$0	
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Groun	d In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
-	6" Center Line	Proactive	\$650	0.0	\$0	_
Project Cost Estimate (at	tach detailed copy)			Propos	ed Year o	of Construction
	Federal Funds	\$3,600				
Local Mate	ch (10% of Total project cost)	\$400				
2004	Total Project Cost	\$4,000	_			
NDDOT Control Office Or	alu.					
NDDOT Central Office Or Project Accepted?		Reference Number				[ID Number
Notes	resnor	vererence muniber				ID Nulliber
						Page: 12
						Segment ID: 1.02
						Date: 10/23/2013

Nelson County Curves

								Cra	shes							
Curve Count	ID	Corridor	Segment Start	End	Curve Advisory Sign	Speed Advisory Sign	Chevrons	Total	к а	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Speed Limit	Risk Ranking	Notes
1	001A	1.03	Nelson 1 Intersection with ND 35	East Border of Nelson County	No	No	No	-		2000	129	No	No	High		
2	004A	4.02	Nelson 4A Intersection with Pavilion Rd	Intersection with ND 1	No	No	No	-		300	105	No	No	High		
3	004B	4.02	Nelson 4A Intersection with Pavilion Rd	Intersection with ND 1	No	No	No	-		350	105	Yes	Yes	High	**	
4	004C	4.02	Nelson 4A Intersection with Pavilion Rd	Intersection with ND 1	Yes	No	No	-		350	105	Yes	Yes	High	**	
5	004D	4.02	Nelson 4A Intersection with Pavilion Rd	Intersection with ND 1	Yes	No	Yes	-		100	105	Yes	Yes	High	**	Arrow Board
6	004E	4.03	Nelson 4 Intersection with ND 1	Intersection with Nelson 35 on 113th Ave	Yes	No	No	-		1150	80	No	No	High	*	S-Curve
7	004F	4.03	Nelson 4 Intersection with ND 1	Intersection with Nelson 35 on 113th Ave	Yes	No	No	-		1250	80	No	No	High		S-Curve
8	004G	4.03	Nelson 4 Intersection with ND 1	Intersection with Nelson 35 on 113th Ave	Yes	No	No	-		1650	80	No	No	High		Curvy Road
9	004H	4.03	Nelson 4 Intersection with ND 1	Intersection with Nelson 35 on 113th Ave	Yes	No	No	-		1900	80	No	No	High		Curvy Road
10	0041	4.03	Nelson 4 Intersection with ND 1	Intersection with Nelson 35 on 113th Ave	Yes	No	No	-		2100	80	No	No	High		Curvy Road
11	018A	18.02	Nelson 18 Intersection with 112th Ave	Intersection with ND 15	Yes	No	No	-		200	75	No	Yes	Low	*	Yellow Rectangles
12	019A	19.01	Nelson 19 Intersection with ND 1	Intersection with US Hwy 2	No	No	No	-		200	76	Yes	No	High	*	Curves Perp to Int
13	035A	35.02	Nelson 35 Intersection with ND 15	Intersection with 34th St	No	No	No	-		1750	184	No	No	High		
14	035B	35.02	Nelson 35 Intersection with ND 15	Intersection with 34th St	No	No	No	-		8500	184	Yes	No	High	*	

Г		Total	
Stars	#	%	
****	0	0%	
****	0	0%	
***	0	0%	
**	3	21%	
*	4	29%	
	7	50%	
	14	100%	

Critical Ranges	Min	Max	
Radius	500	1,200	-
ADT	350	650	

North Dakota SFN 59959 (06	Depa	rtmen			PROGRAM gramming	(J. 7 <u>_</u>						
,		,	Agend Conta Email	cy Name: ct Name: Address:	Nelson Cour Richard Urva nelsonhwy@	nty and ∮gondtc.c	om		ith Pavilio	ļ	tersection w ND DOT District ephone Number	: 3/6	3	
Please attach a Location De					nal sheets to furt	her describ	e your proje	ect.						
Start:	Inters Inters 2-Lan 105 Rural	ection ection e	with Pavilion F with ND 1		L S Shou Shoi Len	ane Width: peed Limit: Ilder Width: ulder Type: gth (miles): le Installed:	High 2' Paved 2.1				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depa ncy Medical Capa	for all Occupan	
Describe Co North Dakota C				& System	ic Ranking R		vooro							
Curve ID 004A	K 0	A 0	Radius (ft)	ADT 105	Intersection on Curve No	Visual Trap No	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project Chevron	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque 35
004B 004C 004D	0 0	0 0	350 350 100	105 105 105	Yes Yes Yes	Yes Yes Yes	** ** **	x x x	- - -	Chevron Chevron Arrow	- - -	- - -	X X X	35 35 Inspect Curve
*Curve number Ranking Cr i			ecutive, as sor		Severe Crashes Radius s	Criteria > 0 500 to 1200 350 to 650 Yes Yes		Curves are se	elected for projects ty or Existing Che	et if:	vel road, etc			
Danawiha D			afatı i İmamus			100								
Describe Pr	opos	seu 3	_		Arrow I Sign/Speed Advis Shoulder Ri	Board Only ory Plaque	Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 3 1 4 .0 miles .0 miles	Total cost \$9,900 \$500 \$3,200 \$0 \$0 \$13,600	Notes - Segmer sheets	nt projects sugge	ested on other
Project Cos	t Est	imate	e (attach de	tailed co	py)					Proposed Ye	ear of Construct	ion		
				Local Matc	h (10% of Total p	leral Funds roject cost) ject Cost	\$1,360							
NDDOT Cer Project Accepte		Office	Only	No		Reference	Number				ID Number			
Notes	cu:			NO	I.	Reference	Number				ID Number			
													Page Segment ID Date	

D			Age Cont Emai	ncy Name: act Name: Address:	Nelson Cou Richard Urv nelsonhwy@	nty and ⊉gondtc.c	om		1 to Inters		th Nelson 35 ND DOT District ephone Number	: 3/6				
				ay use addition Containing	al sheets to fur	ther describ	e your proje	ect.								
	Inters 2-Lan 80 Rural	ection e Paved		35 on 113th A	Show Show Len	Lane Width: Speed Limit: Ulder Width: oulder Type: ogth (miles): le Installed:	High 2' Paved 8.1				Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dr Improvements to Ac Enhancing Emerger	SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Curb Aggressive Driving Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Su Improve Intersection Safety				
				& Systemic	c Ranking R											
North Dakota (Curve ID	Crashe K	es, 200 A	8 - 2012 Radius (ft)	ADT	Intersection on Curve	5 Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque		
004E 004F 004G	0 0 0	0 0 0	1150 1250 1650	80 80 80	No No No	No No No	*	- X X	X - -	Chevron - -	- - -	- - -	- - -	- - -		
004H 004I	0	0	1900 2100	80 80	No No	No No		X X	-	-	-	-	-	-		
*Curve numbe Ranking Cr			ecutive, as s	Sı	evere Crashes Radius	Criteria > 0 500 to 1200 350 to 650 Yes		Curves are se	ty or Existing Che	et if:	ivel road, etc					
					Visual Trap	Yes										
Describe P	ropos	sea S			Arrow gn/Speed Advis Shoulder R	Board Only sory Plaque umble Strip	Proactive Proactive Proactive Proactive	\$500 \$800 \$3,000	per curve per curve per curve per mile	Quantity 1 0 0 0 .0 miles	\$0 \$0 \$0	_Notes - Segmer suggested on o		on projects		
D ' 1 O		····	- /- 44 1 1			ılder Paving	Proactive	\$37,000	per mile	.0 miles	\$0 \$3,300					
Project Gos	ST EST	imat	е (ашаст о	Local Match	Feo (10% of Total p	deral Funds project cost) oject Cost	\$330			Proposea Y	ear of Construct	<u>1011 </u>				
NDDOT Cei		Offic		7		D-f	Ni	I			IID Niverb	T				
Project Accept	eu?		☐ Yes ☐	□No		Reference	: Number	l			ID Number	1				
Notes													Page	v. 2		

Nelson County Summary of Rural Intersection Projects

Page	Intersection ID	Description	Risk Ranking	Install Street Lights	Signs & Markings	Project Cost (\$)
1	18.07	Main St (Nelson 18) & ND 15	****	-	Х	\$3,700
2	35.04	115th Ave (Nelson 35) & US 2/ND 35	***	Х	Х	\$9,700
3	35.03	113th Ave (Nelson 35) & ND 15 (W)	***	Х	Х	\$7,850
4	19.01	42nd St (Nelson 19) & ND 1	***	-	Х	\$3,000
5	19.04	42nd St (Nelson 19) & US 2	***	-	Х	\$1,850
6	35.02	113th Ave (Nelson 35) & ND 15 (E)	***	-	Х	\$2,300
7	4.04	34th St (Nelson 4) & ND 1 (N)	**	-	Х	\$3,700
8	4.08	34th St (Nelson 4) & ND 32	**	-	Х	\$3,700
9	18.01	21st St (Nelson 18) & ND 1	**	-	-	\$2,300
				2	_	¢20.400

8 \$38,100

Nelson County Rural Intersection Listing

Int #	Intersection Description	Skew	On/Near Curve	Development	RR Xing	ADT	Previous STOP (>5mi)	Total Crashes	ADT Cross Product >100,000	Cra	sh Cost
1.01	51st St (Nelson 1) & ND 1	No	No	No	No	548	Yes	0	No	\$	-
1.02	51st St (Nelson 1) & 110th/111th Ave (Nelson 22)	No	No	No	No	120	Yes	0	No	\$	-
1.03	51st St (Nelson 1) & ND 35	No	No	No	No	348	Yes	0	No	\$	-
1.04	51st St (Nelson 1) & 122nd Ave (Nelson 5)	No	No	No	No	166	Yes	0	No	\$	-
1.05	51st St (Nelson 1) & 125th Ave (Nelson 14)	No	No	No	No	330	Yes	0	No	\$	-
4.01	31st St (Nelson 4) & 96th Ave (Nelson 27)	No	No	No	No	89	Unknown	0	No	\$	-
4.02	31st St (Nelson 4) & 100th Ave (Nelson 23)	No	No	No	No	220	No	0	No	\$	-
4.03	105th Ave (Nelson 4A) & ND 1 (S)	No	Yes	No	No	533	Yes	0	No	\$	-
4.04	34th St (Nelson 4) & ND 1 (N)	No	No	No	No	540	Yes	1	No	\$	12,000
4.05	34th St (Nelson 4) & 110th Ave (Nelson 22)	No	No	No	No	135	Yes	0	No	\$	-
4.06	34th St (Nelson 4) & 113th Ave (Nelson 35) (W)	No	No	No	No	170	Yes	0	No	\$	-
4.07	34th St (Nelson 4) & 115th Ave (Nelson 35) (E)	No	No	No	No	212	Yes	0	No	\$	-
4.08	34th St (Nelson 4) & ND 32	No	No	No	No	335	Yes	1	No	\$	12,00
4.09	34th St (Nelson 4) & 49th Ave (Nelson 9)	No	No	No	No	135	Unknown	0	No	\$	-
5.01	116th Ave (Nelson 5) & 19th St (Nelson 20)	No	No	No	No	150	Unknown	0	No	\$	-
5.02	117th Ave (Nelson 5) & ND 15	No	No	No	No	510	Yes	0	No	\$	-
9.01	49th Ave (Nelson 9) & US 2	No	No	No	No	1850	Yes	0	No	\$	-
18.01	21st St (Nelson 18) & ND 1	No	No	No	No	262	Yes	1	No	\$	12,00
18.02	21st St (Nelson 18) & 108th Ave (Nelson 18)	No	No	No	No	44	Yes	0	No	\$	-
18.03	108th Ave (Nelson 18) & 22 1/2 St (Nelson 18)	No	No	No	No	30	Yes	0	No	\$	-
18.04	22 1/2 St (Nelson 18) & 23 1/2 St (Nelson 18)	Yes	Yes	No	No	37	Yes	0	No	\$	-
18.05	22 1/2 St (Nelson 18) & 110th Ave (Nelson 18)	Yes	Yes	No	No	45	Yes	0	No	\$	-
18.06	110th Ave (Nelson 18) & 24th St (Nelson 18)	No	No	No	No	59	Yes	0	No	\$	-
18.07	Main St (Nelson 18) & ND 15	Yes	No	Yes	Yes	895	Yes	0	Yes	\$	-
19.01	42nd St (Nelson 19) & ND 1	Yes	Yes	No	No	625	Yes	0	No	\$	-
19.02	42nd St (Nelson 19) & 111th Ave (Nelson 22) (W)	No	No	No	No	78	Yes	0	No	\$	-
19.03	42nd St (Nelson 19) & 110th Ave (Nelson 22) (E)	No	No	No	No	78	Yes	0	No	\$	-
19.04	42nd St (Nelson 19) & US 2	No	Yes	No	No	2215	Yes	0	Yes	\$	-
20.01	19th St (Nelson 20) & ND 1	No	No	No	No	270	Yes	0	No	\$	-
	19th St (Nelson 20) & 113th Ave (Nelson 35)	No	No	No	No	125	Yes	0	No	\$	-
20.03	19th St (Nelson 20) & ND 32	No	No	No	No	748	Yes	0	No	\$	-
	18th St (Nelson 23) & 98th Ave (Griggs 3)	No	No	No	No	40	Unknown	0	No	\$	-
23.02	100th Ave (Nelson 23) & ND 15	No	No	No	No	703	Yes	0	Yes	\$	-
	29th St (Nelson 24) & 103rd Ave (Nelson 24)	No	No	No	No	83	No	0	No	\$	-
24.02	103rd Ave (Nelson 24) & 28th St (Nelson 24)	No	No	No	No	94	No	0	No	\$	-
24.03	28th St (Nelson 24) & ND 1	No	No	No	No	517	No	0	No	\$	-
	18th St (Nelson 35) & 113th Ave (Nelson 35)	Yes	Yes	No	No	109	Unknown	0	No	\$	-
35.02	113th Ave (Nelson 35) & ND 15 (E)	Yes	No	No	Yes	727	Yes	0	No	\$	-
	113th Ave (Nelson 35) & ND 15 (W)	No	Yes	No	No	850	Yes	1	Yes	\$	824,00
35.04	115th Ave (Nelson 35) & US 2/ND 35	No	Yes	Yes	No	1960	Yes	0	Yes	\$	-

Nelson County Rural Intersection Prioritization

Rank	Int#	Intersection Description	Ske				Previous STOP (>5mi)	Total Crashes	>100,000	Priority	ash Cost
1		Main St (Nelson 18) & ND 15	*		*	*	*		*		\$ -
2		113th Ave (Nelson 35) & ND 15 (W)		*			*	*	*	****	824,000
3		115th Ave (Nelson 35) & US 2/ND 35		*	*		*		*	****	\$ -
4*		22 1/2 St (Nelson 18) & 23 1/2 St (Nelson 18)	*				*			***	\$ -
5*		22 1/2 St (Nelson 18) & 110th Ave (Nelson 18)	*				*			***	\$ -
6		42nd St (Nelson 19) & ND 1	*				*			***	\$ -
7		42nd St (Nelson 19) & US 2		*			*		*	***	\$ -
8		113th Ave (Nelson 35) & ND 15 (E)	*			*	*			***	\$ -
9		34th St (Nelson 4) & ND 1 (N)					*	*			\$ 12,000
10		34th St (Nelson 4) & ND 32					*	*		**	\$ 12,000
11		21st St (Nelson 18) & ND 1					*	*		**	\$ 12,000
12		105th Ave (Nelson 4A) & ND 1 (S)		*			*				\$ -
13		100th Ave (Nelson 23) & ND 15					*		*	**	\$ -
14		18th St (Nelson 35) & 113th Ave (Nelson 35)	*	*						**	\$ -
15		51st St (Nelson 1) & ND 1					*			*	\$ -
16		51st St (Nelson 1) & 110th/111th Ave (Nelson 22)					*			*	\$ -
17 18		51st St (Nelson 1) & ND 35					*			*	\$ -
18		51st St (Nelson 1) & 122nd Ave (Nelson 5)					* *			*	\$ -
20		51st St (Nelson 1) & 125th Ave (Nelson 14) 34th St (Nelson 4) & 110th Ave (Nelson 22)					<u>*</u>			*	\$ -
21		34th St (Nelson 4) & 110th Ave (Nelson 22) 34th St (Nelson 4) & 113th Ave (Nelson 35) (W)					×			*	\$ -
22		34th St (Nelson 4) & 115th Ave (Nelson 35) (W)					*			*	\$
23		117th Ave (Nelson 5) & ND 15					<u></u>			*	\$ -
24		49th Ave (Nelson 9) & US 2					*			*	\$
25		21st St (Nelson 18) & 108th Ave (Nelson 18)					^			*	\$ -
26		108th Ave (Nelson 18) & 22 1/2 St (Nelson 18)					^			*	\$
27		110th Ave (Nelson 18) & 24th St (Nelson 18)					^			*	\$ -
28		42nd St (Nelson 19) & 111th Ave (Nelson 22) (W)					*			*	\$
29		42nd St (Nelson 19) & 110th Ave (Nelson 22) (E)					*			*	\$
30		19th St (Nelson 20) & ND 1					*			*	\$ -
31		19th St (Nelson 20) & 113th Ave (Nelson 35)					*			*	\$ _
32		19th St (Nelson 20) & ND 32					*			*	\$ _
33		31st St (Nelson 4) & 96th Ave (Nelson 27)									\$ -
34	-	31st St (Nelson 4) & 100th Ave (Nelson 23)									\$ _
35		34th St (Nelson 4) & 49th Ave (Nelson 9)									\$ -
36		116th Ave (Nelson 5) & 19th St (Nelson 20)									\$ -
37		18th St (Nelson 23) & 98th Ave (Griggs 3)									\$ -
38		29th St (Nelson 24) & 103rd Ave (Nelson 24)									\$ -
39		103rd Ave (Nelson 24) & 28th St (Nelson 24)									\$ -
40		28th St (Nelson 24) & ND 1									\$ -
-	Tatala	·	Total Stars 6		2	2	31	4	5		

Totals			% That Gets Star	15%	20%	5%	5%	78%	10%	13%
	#	%								
*****	0	0%		Stars						
*****	0	0%	Skew -	If inters	ection is s	kewed at ar	angle of 20	degrees or	greater.	_
****	1	3%	On/Near Curve -	If inters	ection is o	n or within 1	,000 feet of	curve.		
****	2	5%	Development -	If inters	ection aeri	al shows a	commercial	developmen	t with acces	ss near intersection.
***	5	13%	RR Xing -	If inters	ection has	a railroad o	rossing on a	any approach	within 500) feet.
**	6	15%	Previous STOP (>5 mi) -	If vehicl	les approa	ching the st	op control h	ave not had	a previous:	stop along the roadway within 5 miles
*	18	45%	Total Crashes -	If inters	ection has	at least 1 c	rash.			
-	8	20%	ADT Cross Product -	If inters	ection has	an ADT cro	ss product :	> 100,000		
	40	100%								

HIGHWAY SAFETY IN			M (HSIP) PROJE	CT APPLIC	ATION		
North Dakota Department of SFN 59959 (06-2011)	Transportat			10) 0 115			
			ain St (Nelson	•			
Agency Name:					OT Distric		100
Contact Name:				i elepno	ne Numbei	r: 701-322-4 4	133
		vy@gondtc.com	iurthar dagariba yayr arai	o o t			
Please attach a location map(s). Location Description	. You may us	se additional sneets to	urther describe your proj	eci			
Location Description					SHSP Fr	mnhasis Area (c	heck all that apply)
						nol Impaired Driv	
Configuration:		Traffic Control Device	•				estraints for all Occupants
Configuration (2):		Street Lights			U	er/Older Driver S	Safety
Urban/Rural:	Rurai Nelson	Flashers Major Entering ADT			Curb Aggress		ne Departure Crashes
Entering ADT:		Minor Entering ADT					al Capabilities to Increase Survivabil
gg						section Safety	a. capazc. to
Describe Current Safety	logues 9	Svotomio Bonking	Poviou				
North Dakota Crashes, 2008 - 2			vears				
,							
Crashes	Total 0	Angle 0	0.00	- 1	1	140	
Rate (per MVM)		0.0	0.00		1 11 1	25TL 47TH	The state of the s
rtate (per in rin)	0.0	0.0	0.0	_	1		
					11 200		to have been been been been been been been be
				-		34-5	一种 生料 高等
Classic	Value	Critical	Risk Ranking	_			
Skew On/Near Curve		Yes Yes	*	4			TO SEE
Development		Yes	*	3			
Near RR Crossing		Yes	*	1	415		
Distance from previous STOP		Yes	*	100	100	The state of the s	E 17
Volume Cross Product		≥ 100,000	*	/-			
Total Crashes	0	>0	****	-			
Describe Proposed Safet	ty Improve	ements					
	Description	Unit Cost		Units	Cost	Notes	
	Roundabout		per intersection	0	\$0.00	_	
	onal Median		per intersection	0	\$0.00		
Mainline Dynamic W	ose Median	. ,	per intersection per intersection	0 0	\$0.00 \$0.00		
	Street Lights		per street light	Installed	\$0.00		
	e Stop Šign		per sign	2	\$700.00		
	unction Sign		per sign	2	\$700.00		
Upgrade Stop Upgrade Stop Ahe		•	per sign per marking	2 2	\$900.00 \$900.00		
10 1	de Stop Bar		per marking	2	\$500.00		
. 0	ns and CST		per intersection	0	\$0.00		
0: 10: 10: 10:					\$3,700.00	_	
Signs and Markings and Street I Project Cost Estimate (at			per of minor legs associat	Proposed Y		struction	
Troject Cost Estimate (at	itacii ucta	пец сору)		1 Toposeu T	ear or con	isti uction	
Fe	deral Funds	\$3,330					
Local Match (10% of Total p		\$370	=				
Total Pro	oject Cost	\$3,700					
NDDOT Central Office Or	nly						
Project Accepted?		□No	Reference Number			ID Number	
Notes							
	·						Page: 1
						Inte	ersection ID: 18.07 Date: 10/23/2013

HIGHWAY SAFETY IN	IDDOVE	MENT PROCEA	M (HSID) DDO II	ECT ADDI IC	ATION		
North Dakota Department of SFN 59959 (06-2011)			W (HSIP) PROJE	ECT APPLIC	ATION		
,		115th	Ave (Nelson 3	35) & US 2/	ND 35		
Agency Name: Contact Name:	Richard U	Jrvand	·		OOT District one Number	t: 3/6 r: 701-322-44	33
Please attach a location map(s).	You may us	vy@gondtc.com se additional sheets to fu	urther describe your pro	piect			
Location Description				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Nelson	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 1763		Reduce Alcoh Increase the U Younger Drive Curb Aggress Improvements Enhancing En	nol Impaired Driv Use of Safety Re er/Older Driver S ive Driving s to Address Lan	straints for all Occupants
Describe Current Safety I		Systemic Ranking	Review				
North Dakota Crashes, 2008 - 20)12	5	years				
Crashes Rate (per MVM)		Angle 0 0.0	K+A 0.00 0.0				6. m
Skew	Value No	Critical Yes	Risk Ranking	_			
On/Near Curve		Yes	*		TO PERSON IN	-	
Development Near RR Crossing		Yes Yes	*	1			
Distance from previous STOP		Yes	*			Valle	
Volume Cross Product Total Crashes		≥ 100,000 >0	*	_ 1			
			***	_	A STATE OF THE PARTY OF		4
Describe Proposed Safet	y Improve	ements					
	Description	Unit Cost		Units	Cost	Notes - Segm	ent projects suggested on other
	Roundabout		per intersection	0	\$0.00	sheets.	
Direction Mainline Dynamic W	onal Median		per intersection per intersection	0 0	\$0.00 \$0.00		
	ose Median		per intersection	0	\$0.00		
Installing S	Street Lights		per street light	1	\$6,000.00		
Upgrade Ju	e Stop Šign		per sign per sign	2 2	\$700.00 \$700.00		
Upgrade Stop			per sign	2	\$900.00		
Upgrade Stop Ahe	•	•	per marking	2	\$900.00		
Upgrad Review Sigr	de Stop Bar		per marking per intersection	2 0	\$500.00 \$0.00		
Treview Oigi	13 4114 001	Ψ2,400	per intersection	0	\$9,700.00	_	
Signs and Markings and Street L			er of minor legs associa				
Project Cost Estimate (at	tach detai	led copy)		Proposed \	ear of Con	struction	
Local Match (10% of Total p		\$8,730 \$970					
Total Fit	oject Cost	\$9,700					
NDDOT Central Office On				•			
Project Accepted?	☐ Yes [□No	Reference Number			ID Number	
Notes							
							Page: 2
						Inte	ersection ID: 35.04 Date: 10/23/2013

HIGHWAY SAFETY IN	IDDOVE	MENT PROCEA	M (HSID) DDO II	ECT ADDI IC	ATION		
North Dakota Department of SFN 59959 (06-2011)			W (HSIF) FROSE	ECT APPLIC	ATION		
		113th	Ave (Nelson	35) & ND 1	5 (W)		
Agency Name:	Nelson C	ounty	•	ND E	OOT District	: 3/6	
Contact Name:	Richard l	Jrvand		Telepho	ne Number	: 701-322-44	33
Email Address:	nelsonhv	vy@gondtc.com					
Please attach a location map(s).	You may us	e additional sheets to fi	urther describe your pro	ject			
Location Description					01105.5		
						nphasis Area (ch ol Impaired Drivi	neck all that apply)
Configuration:	Т	Traffic Control Device:	Thru Stop			•	straints for all Occupants
Configuration (2):		Street Lights:	•			er/Older Driver S	
Urban/Rural:		Flashers:			Curb Aggressi		
County:		Major Entering ADT:					e Departure Crashes
Entering ADT:	850	Minor Entering ADT:	170		Enhancing Em		al Capabilities to Increase Survivability
					improve inters	section Salety	
Describe Current Safety I	ssues & S	Systemic Ranking	Review				
North Dakota Crashes, 2008 - 20		-	years				
	Total	Anglo	Ι ζ , Λ	900			
Crashes	Total 1	Angle 0	K+A 1.00			a U.I.	
Rate (per MVM)	0.6	0.0	0.6	20	" AT \$19	Tuesday of the last	The state of the s
,				2	3556	50	The state of the s
				2	2	3	A STATE OF THE PARTY OF THE PAR
					Alace Garage	Jan 1	Saul Saul
Cleans	Value	Critical	Risk Ranking	_			The state of the s
Skew On/Near Curve		Yes Yes		N.			111
Development		Yes	*		102		
Near RR Crossing		Yes			300		
Distance from previous STOP		Yes	*		1000		
Volume Cross Product		≥ 100,000	*				
Total Crashes	1	>0	*				
			***		1100000		
Describe Proposed Safet	y Improve	ements					
	Description	Unit Cost		Units	Cost		ent projects suggested on other
	Roundabout onal Median		per intersection per intersection	0 0	\$0.00 \$0.00	sheets.	
Mainline Dynamic W			per intersection	0	\$0.00		
	ose Median		per intersection	0	\$0.00		
	treet Lights		per street light	1	\$6,000.00		
	e Stop Sign		per sign	1	\$350.00		
Upgrade Ju Upgrade Stop /			per sign per sign	1	\$350.00 \$450.00		
Upgrade Stop Ahe			per marking	1	\$450.00		
	de Stop Bar		per marking	1	\$250.00		
Review Sigr	is and CST	\$2,450	per intersection	0	\$0.00	_	
Signs and Markings and Street L	ight project	coete vary by the numb	or of minor logs associa	atod with the intere	\$7,850.00		
Project Cost Estimate (at			ei oi minoi legs associa		Year of Con	struction	
project dest Estimate (un		ion copy)			our or com		
Fed	deral Funds	\$7,065					
Local Match (10% of Total p		\$785	<u>-</u>				
Total Pro	ject Cost	\$7,850					
NDDOT Central Office On	dv						
Project Accepted?		□No	Reference Number			ID Number	I
Notes			110101010011001			1.2	
							Page: 3
						Inte	ersection ID: 35.03
							Date: 10/23/2013

Configuration: X	
Agency Name: Nelson County Contact Name: Richard Urvand Email Address: nelsonhwy@gondtc.com Please attach a location map(s). You may use additional sheets to further describe your project Location Description Configuration: X Configuration: X Configuration (2): Undivided Urban/Rura: Rural County: Nelson Agior Entering ADT: 590 Entering ADT: 625 Minor Entering ADT: 35 Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Skew Yes Yes ★ On/Near Curve Yes Yes ★ Development No Yes Distance from previous STOP Yes Yes ★ Volume Cross Product No ≥ 100,000 Total Crashes 0 > 0 No Yes Distance from previous STOP Yes Yes ★ Volume Cross Product No ≥ 100,000 Total Crashes 0 > 0 No	
Telephone Number: 701-322-4433 Email Address: nelsonhwy @gondtc.com Please attach a location map(s). You may use additional sheets to further describe your project Coation Description	
Please attach a location map(s). You may use additional sheets to further describe your project Location Description	
Please attach a location map(s). You may use additional sheets to further describe your project Coation Description	
SHSP Emphasis Area (check all that apply) Reduce Alcohol Impaired Driving Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Increase the Use of Safety Restraints for all Occupants Increase the Use of Safety Restraints for all Occupants Increase the Use of Safety Restraints for all Occupants Improvements to Address Lane Departure Crashes Improvements to Address Lane Departure Crashes Improvements to Address Lane Departure Crashes Improvements to Address Lane D	
Configuration: X Configuration (2): Undivided Urban/Rural: Rural County: Nelson Entering ADT: 625 Configuration (2): Undivided Urban/Rural: Rural Flashers: No County: Nelson County:	
Configuration: X Traffic Control Device: Thru Stop Configuration (2): Undivided Configuration (2): Undivided Configuration (2): Undivided Configuration (2): Undivided Control Nelson County: Nelson Entering ADT: 625 Minor Entering ADT: 590 Minor Entering ADT: 35 Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Total Angle Skew Yes Yes Angle Critical Risk Ranking Skew Yes Yes Angle Control Review North Crashes Near RC Crossing No Yes Distance from previous STOP Yes	
Configuration: X Traffic Control Device: Thru Stop Configuration (2): Undivided Urban/Rural: Rural Urban/Rural: Rural County: Nelson Entering ADT: 625 Minor Entering ADT: 35 Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Total Rate (per MVM) Skew Yes Yes ★ Development No Yes Distance from previous STOP Yes Volume Cross Product No 2 100,000 Total Crashes 0 > 0 Near RR Crossing No Yes Distance from previous STOP Yes Volume Crashes 0 > 0 Total Crashes 0 > 0 Near RR Crossing No Yes Distance from previous STOP Yes Yes ★ Volume Cross Product No 2 100,000 Total Crashes 0 > 0 ★★★	
Configuration (2): Undivided Urban/Ruria Rurial Flashers: No Urban/Ruria Rurial Plashers: No Urban/Ruria Rurial Ruria	
County: Nelson Entering ADT: 590	
Entering ADT: 625	
Describe Current Safety Issues & Systemic Ranking Review	in robilita
North Dakota Crashes, 2008 - 2012 5 years	/ivability
Total	
Total Angle K+A	
Crashes Rate (per MVM) 0 0 0.00 Nate (per MVM) 0.0 0.0 0.0 Value Critical Risk Ranking Skew Yes Yes ★ On/Near Curve Yes Yes ★ Development No Yes No Yes Near RR Crossing No Yes No Yes Distance from previous STOP Yes Yes ★ Volume Cross Product No ≥ 100,000 >0 Total Crashes 0	
Rate (per MVM) 0.0 0.0 0.0	
Value Critical Risk Ranking Skew Yes Yes ★ On/Near Curve Yes Yes ★ Development No Yes Near RR Crossing No Yes Distance from previous STOP Yes ★ Volume Cross Product No ≥ 100,000 Total Crashes 0 >0 ***	
Skew Yes Yes ★ On/Near Curve Yes Yes ★ Development No Yes Near RR Crossing No Yes Near RR Crossing No Yes Yes Yes Volume Cross Product No ≥ 100,000 Yes Yes Total Crashes 0 >0 ****	
Skew Yes Yes ★ On/Near Curve Yes Yes ★ Development No Yes Near RR Crossing No Yes Near RR Crossing No Yes Yes Yes Volume Cross Product No ≥ 100,000 Yes Yes Total Crashes 0 >0 ****	
Skew Yes Yes ★ On/Near Curve Yes Yes ★ Development No Yes Near RR Crossing No Yes Near RR Crossing No Yes Yes Yes Volume Cross Product No ≥ 100,000 Yes Yes Total Crashes 0 >0 ****	
On/Near Curve Yes Yes ★ Development No Yes Near RR Crossing No Yes Distance from previous STOP Yes Yes ★ Volume Cross Product No ≥ 100,000 Total Crashes 0 >0 ★★★	
Development No Yes Near RR Crossing No Yes Distance from previous STOP Yes Yes Volume Cross Product No ≥ 100,000 Total Crashes 0 >0 ★★★	
Near RR Crossing No Yes Distance from previous STOP Yes Yes ★ Volume Cross Product No ≥ 100,000 Total Crashes 0 >0 ★★★	
Distance from previous STOP Yes Yes ★ Volume Cross Product No ≥ 100,000 Total Crashes 0 >0 ★★★	
Total Crashes 0 >0	

Describe Proposed Safety Improvements	
Description Unit Cost Units Cost Notes - Segment projects suggested on o	ər
Roundabout \$1,000,000 per intersection 0 \$0.00 sheets.	
Directional Median \$750,000 per intersection 0 \$0.00 Mainline Dynamic Warning Sign \$50,000 per intersection 0 \$0.00	
Close Median \$25,000 per intersection 0 \$0.00	
Installing Street Lights \$6,000 per street light 0 \$0.00	
Upgrade Stop Sign \$350 per sign 2 \$700.00	
Upgrade Junction Sign \$350 per sign 2 \$700.00 Upgrade Stop Ahead Sign \$450 per sign 2 \$900.00	
Upgrade Stop Ahead Marking \$450 per marking 1 \$450.00	
Upgrade Stop Bar \$250 per marking 1 \$250.00	
Review Signs and CST \$2,450 per intersection 0 \$0.00 \$3.000.00	
Signs and Markings and Street Light project costs vary by the number of minor legs associated with the intersection.	
Project Cost Estimate (attach detailed copy) Proposed Year of Construction	
Federal Funds \$2,700	
Local Match (10% of Total project cost) \$300	
Total Project Cost \$3,000	
NDDOT Central Office Only	
Project Accepted?	
Notes	
Page: 4	
Intersection ID: 19.01 Date: 10/23/2013	

HIGHWAY SAFETY IN	/PROVE	MENT PROGRA	M (HSIP) PROJE	CT APPLIC	ΔΤΙΟΝ	
North Dakota Department of SFN 59959 (06-2011)			iii (110ii) 1 100E	OT ALL LIO	ATION	
		4:	2nd St (Nelsor	19) & US	2	
Agency Name:					OT Distric	
Contact Name:				Telepho	ne Numbe	r: 701-322-4433
		vy@gondtc.com				
Please attach a location map(s).	You may us	e additional sheets to fu	urther describe your proj	ect		
Location Description				1	CLICD E	washasia Ausa (ahashall that analu)
						mphasis Area (check all that apply) nol Impaired Driving
Configuration:	Т	Traffic Control Device:	Thru Stop	_		Use of Safety Restraints for all Occupants
Configuration (2):		Street Lights:	No		Younger Drive	er/Older Driver Safety
Urban/Rural:		Flashers:			Curb Aggress	
County: Entering ADT:		Major Entering ADT: Minor Entering ADT:				s to Address Lane Departure Crashes mergency Medical Capabilities to Increase Survivabili
Entering AD1.	2213	Willion Entering ADT.	70			section Safety
					•	•
Describe Current Safety I North Dakota Crashes, 2008 - 20		-	Review years			
North Dakota Crashes, 2000 - 20	J12	3	years			
	Total	Angle	K+A	_	1	The state of the s
Crashes		0	0.00			
Rate (per MVM)	0.0	0.0	0.0	- n	1	A
				8		
	Value	Critical	Risk Ranking	_		
Skew		Yes		- 2	Rees.	
On/Near Curve		Yes	*		Land Marie	
Development Near RR Crossing		Yes Yes		3	ALC: M	
Distance from previous STOP		Yes	*	200		
Volume Cross Product		≥ 100,000	*	8	183	
Total Crashes	0	>0		_		
			***			The state of the s
Describe Proposed Safet	y Improve	ements				
	Description	Unit Cost		Units	Cost	Notes - Qualifies for street light. Segment projects
	Roundabout		per intersection	0	\$0.00	suggested on other sheets.
	onal Median		per intersection	0	\$0.00	
Mainline Dynamic W			per intersection	0	\$0.00	
_	ose Median Street Lights		per intersection	0 0	\$0.00	
	e Stop Sign		per street light per sign	1	\$0.00 \$350.00	
	unction Sign		per sign	1	\$350.00	
Upgrade Stop			per sign	1	\$450.00	
Upgrade Stop Ahe	•		per marking	1	\$450.00	
Upgrad Review Sigr	de Stop Bar	•	per marking per intersection	1 0	\$250.00 \$0.00	
ixeview Sigi	is and Con	Ψ2,430	per intersection	0	\$1,850.00	-
Signs and Markings and Street L			er of minor legs associa			
Project Cost Estimate (at	tach detai	iled copy)		Proposed Y	ear of Con	struction
Fed	deral Funds	\$1,665				
Local Match (10% of Total p		\$185	=			
Total Pro	oject Cost	\$1,850				
NDDOT Central Office Or	nlv					
Project Accepted?		□ No	Reference Number	Т		ID Number
Notes				•		
	_					Page: 5
						Intersection ID: 19.04
						Date: 10/23/2013

HIGHWAY SAFETY IN	IDDOVE	MENT PROCEA	M (HSID) DDO IE	ECT ADDI IC	YATION		
North Dakota Department of SFN 59959 (06-2011)			IWI (HOIF) FROOL	LOT AFFEIG	ATION		
,		113tl	n Ave (Nelson	35) & ND ²	15 (E)		
Agency Name:			-	ND I	DOT Distric	t: 3/6	
Contact Name:				Telepho	one Numbe	r: 701-322-44	133
		vy@gondtc.com					
Please attach a location map(s).	You may us	se additional sheets to f	urther describe your pro	ject			
Location Description					CHCD E	mphasis Area (a	heck all that apply)
						nol Impaired Driv	11.77
Configuration:	Χ	Traffic Control Device:	Thru Stop			•	estraints for all Occupants
Configuration (2):		Street Lights:				er/Older Driver S	Safety
Urban/Rural:		Flashers:			Curb Aggress		Description Order
County: Entering ADT:		Major Entering ADT: Minor Entering ADT:					ne Departure Crashes al Capabilities to Increase Surviva
Entering AD1.	121	Willion Entering ABT.	40			section Safety	ai Capabilities to increase our viva
Describe Current Safety	leeune & G	Svetomic Pankina	Poviow				
North Dakota Crashes, 2008 - 2			years				
	T-1-1	A1-	17. 4	_			
Crashes	Total 0	Angle 0	0.00				
Rate (per MVM)		0.0	0.0			THE RESERVE	
, the same of the				_			
Skew	Value Yes	Critical Yes	Risk Ranking ★				SE THE SECTION
On/Near Curve		Yes	^				Let .
Development		Yes				X	1500
Near RR Crossing		Yes	*			- 40	
Distance from previous STOP		Yes	*				
Volume Cross Product Total Crashes		≥ 100,000 >0					
7000 0100100			***	_	100		
Describe Proposed Safet	ty Improve	aments					
Describe i roposca Garet	y improve	mento					
	Description	Unit Cost		Units	Cost	Notes	
	Roundabout onal Median		per intersection per intersection	0 0	\$0.00 \$0.00		
Mainline Dynamic W			per intersection	0	\$0.00		
	ose Median		per intersection	0	\$0.00		
	Street Lights		per street light	0	\$0.00		
	e Stop Sign		per sign	2	\$700.00		
Upgrade Stop	Inction Sign		per sign per sign	2 2	\$700.00 \$900.00		
Upgrade Stop Ahe			per marking	0	\$0.00		
	de Stop Bar	·	per marking	0	\$0.00		
Review Sigr	ns and CST	\$2,450	per intersection	0	\$0.00 \$2,300.00	_	
Signs and Markings and Street L	_ight project	costs vary by the numb	er of minor legs associa	ited with the inters	. ,		
Project Cost Estimate (at	tach deta	iled copy)		Proposed	Year of Con	struction	
Fed	deral Funds	\$2,070					
Local Match (10% of Total p		\$230	<u>-</u>				
Total Pro	oject Cost	\$2,300					
NDDOT Central Office Or	nly						
Project Accepted?		□No	Reference Number			ID Number	
Notes							
							Page: 5
						Inte	ersection ID: 35.02 Date: 10/23/2013

	DD 01/51	AENT DRAGE	M (1101D) DD 0 15			
HIGHWAY SAFETY IMF North Dakota Department of Tr			M (HSIP) PROJE	CI APPLIC	CATION	
SFN 59959 (06-2011)						
			th St (Nelson	-		
Agency Name: N					DOT District	
Contact Name: R				Teleph	one Number	: 701-322-4433
Email Address: n Please attach a location map(s). Y			urther describe your pro	iect		
Location Description	ou may use	additional sheets to i	urtiler describe your pro	ject		
					SHSP En	nphasis Area (check all that apply)
	_					ol Impaired Driving
Configuration: T		Traffic Control Device:	•			Jse of Safety Restraints for all Occupants
Configuration (2): U Urban/Rural: R		Street Lights: Flashers:			Curb Aggress	er/Older Driver Safety
County: N		Major Entering ADT:				s to Address Lane Departure Crashes
Entering ADT: 5		Minor Entering ADT:			•	nergency Medical Capabilities to Increase Survivability
				✓	Improve Inters	section Safety
Describe Current Safety Is	SUPS & S	vstemic Ranking	Review			
North Dakota Crashes, 2008 - 201	12		years			
	Total	Anglo	KıA			
Crashes	1	Angle 0	0.00	- 1		
Rate (per MVM)	1.0	0.0	0.0	_		
				_		
	Value	Critical	Risk Ranking	1		
Skew	No	Yes	Trisk Tranking	_		
On/Near Curve	No	Yes				
Development	No	Yes				
Near RR Crossing	No	Yes				THE RESERVE OF THE PARTY OF THE
Distance from previous STOP Volume Cross Product	Yes No	Yes ≥ 100,000	*			
Total Crashes	1	>0	*			ALCOHOLD SECTION
			**	_		
Describe Proposed Safety	Improve	ments				
200011201110poodu Gurety	p. o v o.	nonco				
	escription	Unit Cost		Units	Cost	Notes - Segment and curve projects suggested on
	oundabout al Median		per intersection per intersection	0 0	\$0.00 \$0.00	other sheets.
Mainline Dynamic War			per intersection	0	\$0.00	
· · · · · · · · · · · · · · · · · · ·	se Median	\$25,000	per intersection	0	\$0.00	
Installing Str			per street light	0 2	\$0.00	
Upgrade : Upgrade June			per sign per sign	2	\$700.00 \$700.00	
Upgrade Stop Al			per sign	2	\$900.00	
Upgrade Stop Ahead			per marking	2	\$900.00	
	Stop Bar		per marking	2	\$500.00	
Review Signs	and CST	\$2,450	per intersection	0	\$0.00 \$3,700.00	_
Signs and Markings and Street Lig	ght project c	osts vary by the numb	er of minor legs associa	ted with the inter		
Project Cost Estimate (atta	ach detail	led copy)		Proposed	Year of Con	struction
Fede	eral Funds	\$3,330				
Local Match (10% of Total pro		\$370	_			
Total Proje	ect Cost	\$3,700				
NDDOT Central Office Only	V					
		□No	Reference Number	T		ID Number
Notes						•
						Page: 6 Intersection ID: 4.04
						Date: 10/23/2013

HIGHWAY SAFETY IN	/PROVE	MENT PROGRA	M (HSIP) PROJE	CT APPLIC	ATION		
North Dakota Department of SFN 59959 (06-2011)		tion Programming	. ,				
			4th St (Nelson	4) & ND 3	2		
Agency Name:		•			OOT District		
Contact Name:				Telepho	ne Numbei	r: 701-322-44	33
Email Address:	nelsonhv	wy@gondtc.com					
Please attach a location map(s).	You may us	se additional sheets to fe	urther describe your proj	ect			
Location Description							
							neck all that apply)
O	V	Treffic Control Devices	The Cton			nol Impaired Driv	S
Configuration: Configuration (2):		Traffic Control Device: Street Lights:	•			Jse of Safety Re er/Older Driver S	straints for all Occupants
Urban/Rural:		Flashers:			Curb Aggress		alety
County:		Major Entering ADT:					e Departure Crashes
Entering ADT:		Minor Entering ADT:					al Capabilities to Increase Survivability
				✓	Improve Inters	section Safety	
		0 1 1 0 11	<u> </u>				
Describe Current Safety I North Dakota Crashes, 2008 - 20							
North Dakota Crasnes, 2008 - 20	J12	5	years				
	Total	Angle	K+A			300	
Crashes		0	0.00	_ 8	and a		
Rate (per MVM)	1.6	0.0	0.0	_			
				- 8	40.0	2 2	
					-		
		0 '** 1	D: 1 D 1:		-		
Skew	Value No	Critical Yes	Risk Ranking	-			
On/Near Curve		Yes					
Development		Yes					
Near RR Crossing		Yes		8			
Distance from previous STOP		Yes	*				
Volume Cross Product	: No	≥ 100,000					Marin State of the
Total Crashes	1	>0	*	_ 1			
			**		The Court of the C		
Describe Proposed Safet	v Improv	omonts					
Describe i roposcu daret	y impiove	Jiliones					
	Description	Unit Cost		Units	Cost	Notes - Segm	ent projects suggested on other
F	Roundabout	\$1,000,000	per intersection	0	\$0.00	sheets.	. ,
	onal Median	*,	per intersection	0	\$0.00		
Mainline Dynamic W			per intersection	0	\$0.00		
_	ose Median Street Lights		per intersection	0	\$0.00 \$0.00		
	e Stop Sign		per street light per sign	2	\$0.00 \$700.00		
	unction Sign		per sign	2	\$700.00		
Upgrade Stop			per sign	2	\$900.00		
Upgrade Stop Ahe	•		per marking	2	\$900.00		
	de Stop Bar	•	per marking	2	\$500.00		
Review Sign	is and CST	\$2,450	per intersection	0	\$0.00 \$3,700.00	<u> </u>	
Signs and Markings and Street L	ight project	costs vary by the numb	er of minor legs associat	ed with the inters	. ,		
Project Cost Estimate (at			or or minor logo accociat	Proposed \		struction	
roject eest =camate (a.t							
Fed	deral Funds	\$3,330					
Local Match (10% of Total p		\$370	<u>-</u>				
Total Pro	oject Cost	\$3,700					
MDDOT OF THE LOSS - OF							
NDDOT Central Office Or			To			Tie ii	
Project Accepted?	Yes	□No	Reference Number			ID Number	
Notes							
							Page: 7
						Inte	ersection ID: 4.08
1							Date: 10/23/2013

HIGHWAY SAFETY IN	IPROVE	MENT PROGRA	M (HSIP) PROJE	CT APPLIC	ΔΤΙΟΝ		
North Dakota Department of SFN 59959 (06-2011)		ion Programming	. ,				
		2	1st St (Nelson	18) & ND	1		
Agency Name:					OT Distric		
Contact Name:				Telepho	ne Numbe	r: 701-322-44	33
Email Address:	nelsonhw	vy@gondtc.com					
Please attach a location map(s).	You may us	e additional sheets to fi	urther describe your pro	ject			
Location Description					CLICD F		and all that analy)
						mpnasis Area (cr hol Impaired Drivi	neck all that apply)
Configuration:	Χ	Traffic Control Device:	Thru Stop	_		•	straints for all Occupants
Configuration (2):		Street Lights:	Unknown		Younger Drive	er/Older Driver S	
Urban/Rural:			Unknown		Curb Aggress		
County: Entering ADT:		Major Entering ADT: Minor Entering ADT:					e Departure Crashes al Capabilities to Increase Survivability
Entering AD1.	202	Willion Entering ADT.	22			rsection Safety	a Capabilities to increase Survivability
						,	
Describe Current Safety		-					
North Dakota Crashes, 2008 - 20)12	5	years				
	Total	Angle	K+A	100		1	() () () () () () () ()
Crashes		0	0.00		17 30		MON GO
Rate (per MVM)	2.1	0.0	0.0	_	- 5	MINISTER OF	Altri
					1 2 2 3		
	Value	Critical	Risk Ranking	F-1	一个数别		
Skew		Yes	<u> </u>		avel at 1		17
On/Near Curve	No	Yes		4		1	
Development		Yes				la la se	
Near RR Crossing Distance from previous STOP		Yes Yes		-	10.2	基 添	8. (E. P.)
Volume Cross Product		res ≥ 100,000	*	_			
Total Crashes		>0	*				
			**	_		11 12 14	
Describe Proposed Safet	v Improve	omonte					
Describe i roposed saret	y improve	inents					
	Description	Unit Cost		Units	Cost	Notes - Segme	ent projects suggested on other
	Roundabout		per intersection	0	\$0.00	sheets.	
	onal Median		per intersection	0	\$0.00		
Mainline Dynamic W	ose Median	. ,	per intersection per intersection	0 0	\$0.00 \$0.00		
Installing S	Street Lights		per street light	0	\$0.00		
	e Stop Šign		per sign	2	\$700.00		
	inction Sign		per sign	2	\$700.00		
Upgrade Stop A Upgrade Stop Ahe			per sign per marking	2 0	\$900.00 \$0.00		
. •	de Stop Bar	·	per marking	0	\$0.00		
Review Sigr	•	·	per intersection	0	\$0.00		
					\$2,300.00	 "	
Signs and Markings and Street L			er of minor legs associa			actruction	
Project Cost Estimate (at	tacn detai	іеа сору)		Proposed Y	ear or Con	istruction	
Fed	deral Funds	\$2,070					
Local Match (10% of Total p		\$230	_				
Total Pro	oject Cost	\$2,300					
NDDOT Central Office Or	alı.						
Project Accepted?		□No	Reference Number			ID Number	T
Notes			reference (variber			ID Number	L
							Page: 8
						Inte	ersection ID: 18.01
							Date: 10/23/2013

23 USC 409 NDDOT Reserves All Objections

APPENDIX 4C Pembina County

Pembina County Rural Segment Projects

Page	Corridor ID	Route #	Start	End	Length	Risk Ranking	4" Edge Line	6" Edge Lines	Edge Rumble Strip	Project Cos
1	55.01	Pembina 55	Pembina/Cavalier County Line	Intersection with Delano Ave (in Walhalla)	1.2	****	1.2	0.0	0.0	\$480.00
2	1.03	Pembina 1	Bathgate west city limit	Bathgate east city limit	0.8	****	0.0	0.8	0.0	\$520.0
3	12.03	Pembina 12	Intersection with ND 5 / 93rd Street	Intersection with 101st Street	7.1	***	0.0	7.1	0.0	\$4,615.0
4	510.01		Intersection with 3rd Avenue	Intersection with 142nd Avenue	0.5	***	1.0	0.0	0.0	\$400.0
5	1.04		Bathgate east city limit (could be intersection with 148th Avenue)	Intersection with SB IH 29 Ramps	10.7	***	0.0	10.7	0.0	\$6,955.
6	12.01	Pembina 12	Pembina / Walsh County Line	Intersection with ND 66	4.0	***	8.0	0.0	0.0	\$3,200.
7	511.01	N/A	1345 feet south of ND 5	Intersection with 97th Street / Main Street	1.5	***	3.0	0.0	0.0	\$1,200.
8	502.01	N/A	Intersection with 160th Avenue	1013 feet east of interchange (east of intersection with Old North Dakota 44)	0.6	***	0.0	0.6	0.0	\$390.0
9	514.02	N/A	Pembina north city limit	4670 feet north of ND 59	0.9	***	0.9	0.0	0.0	\$360.0
10	55.03	Pembina 55	Intersection with ND 18 / 144th Avenue	Interchange with IH 29 SB Ramps	14.1	***	0.0	0.0	14.1	\$49,350
11	507.01	N/A	Intersection with 160th Avenue	Intersection with 160th Avenue	0.5	**	0.0	0.5	0.0	\$325.0
12	2.01	Pembina 2	"Y" Intersection with ND 5	Intersection with 107th Avenue	10.9	**	0.0	10.9	0.0	\$7,085.
13	1.02	Pembina 1	Intersection with ND 18 / 144th Avenue	Bathgate west city limit	3.3	**	0.0	3.3	0.0	\$2,145.
14	3.05	Pembina 3	Intersection with ND 18 / 140th Avenue	Intersection with ND 81 / 148th Avenue	8.0	**	0.0	8.0	0.0	\$5,200
15	7.01	Pembina 7	Intersection with 127th Avenue	Intersection with ND 32&66 / 129th Avenue	2.0	**	0.0	2.0	0.0	\$1,300
							14.1	43.9	14.1	\$83.52

Pembina County Rural Segment Listing *High Priority Segments Project Sheet Page Numbe

roject Sheet Page*	Corridor	Route	Start	End	Length (miles)	Lane Departure Crashes	ADT	Lane Departure Density	Access Density	Curves w/ Critical Radius / Mile	Edge Risk Assesment
	1.01	Pembina 1	Intersection with ND 32	Intersection with ND 18 / 144th Avenue	16.9	5	339	0.06	7.8	0.00	1
13	1.02	Pembina 1	Intersection with ND 18 / 144th Avenue	Bathgate west city limit	3.3	0	265	0.00	7.9	0.00	2
2	1.03	Pembina 1	Bathgate west city limit	Bathgate east city limit	0.8	0	240	0.00	28.5	3.88	2
5	1.04	Pembina 1	Bathgate east city limit (could be intersection with 148th Aven	Intersection with SB IH 29 Ramps	10.7	3	200	0.06	7.1	0.00	2
	1.05	Pembina 1	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.2	0	80	0.00	12.3	0.00	1
	1.06	Pembina 1	Intersection with NB IH 29 Ramps	Intersection with Old Highway 81	0.1	0	40	0.00	71.5	0.00	1
12	2.01	Pembina 2	"Y" Intersection with ND 5	Intersection with 107th Avenue	10.9	0	363	0.00	5.8	0.00	2
	3.01	Pembina 3	Pembina/Cavalier County Line	Intersection with ND 32 / 130th Avenue	3.0	2	109	0.13	6.7	0.00	1
	3.02	Pembina 3	Intersection with ND 32 / 130th Avenue	Hensel west limit	10.7	0	185	0.00	3.9	0.00	1
	3.03	Pembina 3	Hensel west limit	Hensel east limit	0.5	0	410	0.00	26.3	0.00	1
	3.04	Pembina 3	Hensel east limit	Intersection with ND 18 / 140th Avenue	1.7	0	343	0.00	12.2	0.00	1
14	3.05	Pembina 3	Intersection with ND 18 / 140th Avenue	Intersection with ND 81 / 148th Avenue	8.0	1	264	0.02	5.0	0.00	2
	3.06	Pembina 3	Intersection with ND 81 / 148th Avenue	Intersection with SB IH 29 Ramps	11.7	0	87	0.00	4.9	0.00	2
	3.07	Pembina 3	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.1	0	65	0.00	22.5	0.00	1
	3.08	Pembina 3	Intersection with NB IH 29 Ramps	2624 feet east of interchange	0.5	0	35	0.00	18.1	0.00	1
	4.01	Pembina 4	Pembina / Walsh County Line	Intersection with ND 66	2.0	0	110	0.00	6.0	0.00	2
	4.02		Intersection with ND 5	Intersection with 101st Street	5.0	0	130	0.00	5.6	0.00	1
	6.01	Pembina 6	Intersection with 92nd Street (on east side of 127th Avenue)	Intersection with ND 5 / 93rd Street	1.0	0	80	0.00	7.0	0.00	1
15	7.01		Intersection with 127th Avenue	Intersection with ND 32&66 / 129th Avenue	2.0	0	198	0.00	6.0	0.00	2
	9.01		Walhalla east city limit	Intersection with 135th Avenue	7.6	1	458	0.03	6.5	0.26	1
	11.01		I Intersection with ND 81 / 148th Avenue	Interchange with IH 29	12.1	2	90	0.03	6.5	0.00	1
			I Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.2	1	100	1.24	12.4	0.00	1
			I Intersection with NB IH 29 Ramps	Intersection with 161st Avenue	0.1	0	180	0.00	26.0	0.00	1
6	12.01		Pembina / Walsh County Line	Intersection with ND 66	4.0	2	193	0.10	8.0	0.00	2
0	12.02		2 Intersection with ND 66	Intersection with ND 5 / 93rd Street	9.9	0	130	0.00	5.9	0.20	1
3	12.03		2 Intersection with ND 5 / 93rd Street	Intersection with 101st Street	7.1	2	409	0.06	8.1	0.14	1
1	55.01		5 Pembina/Cavalier County Line	Intersection with Delano Ave (in Walhalla)	1.2	0	375	0.00	19.6	0.85	2
	55.02		5 Intersection with ND 32 / 128th Avenue	Intersection with ND 18 / 144th Avenue	16.0	1	315	0.01	6.0	0.19	1
10	55.03		5 Intersection with ND 18 / 144th Avenue	Interchange with IH 29 SB Ramps	14.1	7	366	0.10	5.8	0.13	1
10	500.01	N/A	Intersection with ND 66	Intersection with 84th Street	4.0	1	359	0.05	7.2	0.00	
8	502.01	N/A	Intersection with 160th Avenue	1013 feet east of interchange (east of intersection with Old North Dakota 44)	0.6	2	60	0.73	20.0	0.00	2
0	503.01	N/A	Intersection with 133rd Avenue	Intersection with 139th Avenue	7.0	0	70	0.00	4.9	0.00	2
	504.01	N/A	Intersection with 133rd Avenue	Intersection with 92nd Street	1.0	0	29	0.00	5.9	0.00	2
-	505.01	N/A	SW to NE curve in trees	Intersection with 127th Avenue	0.5	0	70	0.00	13.5	0.00	0
-	505.02	N/A	Intersection with ND 32 / 130th Avenue	Intersection with 133rd Avenue	3.5	0	15	0.00	4.8	0.00	2
	506.01	N/A	1460 feet south of 93rd Street	Intersection with 133rd Avenue Intersection with 93rd Street	0.9	0	5	0.00	3.3	0.00	0
11	507.01	N/A	Intersection with 160th Avenue	Intersection with 160th Avenue	0.5	0	20	0.00	22.0	0.00	3
11	508.01	N/A	Intersection with 92nd Street (on west side of 127th Avenue)	Intersection with 190th Avenue Intersection with 92nd Street (on east side of 127th Avenue)	0.5	0	80	0.00	22.0	0.00	3
	509.01	N/A N/A	Intersection with 92nd Street (on west side of 127th Avenue) Intersection with ND 5 / 93rd Street	End of road	1.4	0	29	0.00	8.0	5.11	0
4	510.01	N/A N/A	Intersection with ND 5 / 93rd Street Intersection with 3rd Avenue	Intersection with 142nd Avenue	0.5	0	280	0.00	26.0	0.00	2
4	510.01	N/A N/A	1345 feet south of ND 5	Intersection with 142rid Avenue Intersection with 97th Street / Main Street	1.5	0	190	0.00	9.0	0.00	2
1	511.01	N/A N/A	1345 feet south of ND 5 5280 feet north of 101st Street	Pembina south city limit	1.5 4.8		75	0.00	5.4	0.00	0
0					0.9	1	75 29	0.04		2.26	
9	514.02	N/A	Pembina north city limit	4670 feet north of ND 59		0			9.0		2
	516.01	N/A	Intersection with ND 18 / 144th Avenue	Neche south city limit	0.1	0	500	0.00	19.7	0.00	0
	518.01	N/A	Intersection with 101st Stree	Intersection with 107th Stree	6.0 194.7	0 31	275	0.00	7.8	0.66	1

Edge Risk Legend

Risky' - NEITHER shoulder or good clear zone
 Either a shoulder OR good clear zone
 BOTH shoulder and a good clear zone

Critical ADT Range - Lane Departure 150 500

Critical Radius Curves 15 194.7 Total Mileage Years
Average Density (Total/Mile) 0.08

Pembina County Rural Segment Prioritization - Lane Departure Priority

#	Corridor	Route	Start	End	Length	ADT .	ADT Range	Lane Departure Density	Access Density	Curve Critical Radius Density	Edge Risk	Totals	Tiebrea Edge Risk	akers ADT
1	55.01	Pembina 55	Pembina/Cavalier County Line	Intersection with Delano Ave (in Walhalla)	1.2	375	*		*	*	*	****	2	375
2	1.03	Pembina 1	Bathgate west city limit	Bathgate east city limit	0.8	240	*		*	*	*	****	2	240
3	12.03	Pembina 12	Intersection with ND 5 / 93rd Street	Intersection with 101st Street	7.1	409	*	*	*	*		****	1	409
4	510.01	N/A	Intersection with 3rd Avenue	Intersection with 142nd Avenue	0.5	280	*		*		*	***	2	280
5	1.04	Pembina 1	Bathgate east city limit (could be intersection with 148th Avenue)	Intersection with SB IH 29 Ramps	10.7	200	*	*			*	***	2	200
6	12.01	Pembina 12	Pembina / Walsh County Line	Intersection with ND 66	4.0	193	*	*			*	***	2	193
7	511.01	N/A	1345 feet south of ND 5	Intersection with 97th Street / Main Street	1.5	190	*		*		*	***	2	190
8	502.01	N/A	Intersection with 160th Avenue	1013 feet east of interchange (east of intersection with Old North Dakota 44)	0.6	60		*	*		*	***	2	60
9	514.02	N/A	Pembina north city limit	4670 feet north of ND 59	0.9	29			*	*	*	***	2	29
10	55.03		Intersection with ND 18 / 144th Avenue	Interchange with IH 29 SB Ramps	14.1	366	*	*		*		***	1	366
11	507.01	N/A	Intersection with 160th Avenue	Intersection with 160th Avenue	0.5	20			*		*	**	3	20
12	2.01	Pembina 2	"Y" Intersection with ND 5	Intersection with 107th Avenue	10.9	363	*				*	**	2	363
13	1.02	Pembina 1	Intersection with ND 18 / 144th Avenue	Bathgate west city limit	3.3	265	*				*	**	2	265
14	3.05	Pembina 3	Intersection with ND 18 / 140th Avenue	Intersection with ND 81 / 148th Avenue	8.0	264	*				*	**	2	264
15	7.01	Pembina 7	Intersection with 127th Avenue	Intersection with ND 32&66 / 129th Avenue	2.0	198	*				*	**	2	198
16	9.01	Pembina 9	Walhalla east city limit	Intersection with 135th Avenue	7.6	458	*			*		**	1	458
17	3.03	Pembina 3	Hensel west limit	Hensel east limit	0.5	410	*		*	*		**	1	410
	500.01	N/A	Intersection with ND 66	Intersection with 84th Street	4.0	359	*	*	*			**	1	359
18 19	3.04	Pembina 3	Hensel east limit	Intersection with 84th Street Intersection with ND 18 / 140th Avenue	1.7	359	*	*	*			**	1	343
20		Pembina 3	Intersection with ND 32	Intersection with ND 18 / 140th Avenue	16.9	343	*	*	*			**		339
	1.01							×					1	
21	55.02	Pembina 55		Intersection with ND 18 / 144th Avenue	16.0	315	*			*		**	1	315
22	518.01	N/A	Intersection with 101st Street	Intersection with 107th Street	6.0	275	*			*		**	1	275
23	11.03		Intersection with NB IH 29 Ramps	Intersection with 161st Avenue	0.1	180	*		*			**	1	180
24	11.02	Pembina 11	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.2	100		*	*			**	1	100
25	516.01	N/A	Intersection with ND 18 / 144th Avenue	Neche south city limit	0.1	500	*		*			**	0	500
26	514.01	N/A	5280 feet north of 101st Street	Pembina south city limit	4.8	75		*		*		**	0	75
27	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	1.4	29			*	*		**	0	29
28	4.01	Pembina 4	Pembina / Walsh County Line	Intersection with ND 66	2.0	110					*	*	2	110
29	3.06	Pembina 3	Intersection with ND 81 / 148th Avenue	Intersection with SB IH 29 Ramps	11.7	87					*	*	2	87
30	503.01	N/A	Intersection with 133rd Avenue	Intersection with 139th Avenue	7.0	70					*	*	2	70
31	504.01	N/A	Intersection with 91st Street	Intersection with 92nd Street	1.0	29					*	*	2	29
32	505.02	N/A	Intersection with ND 32 / 130th Avenue	Intersection with 133rd Avenue	3.5	15					*	*	2	15
33	3.02	Pembina 3	Intersection with ND 32 / 130th Avenue	Hensel west limit	10.7	185	*					*	1	185
34	12.02	Pembina 12	Intersection with ND 66	Intersection with ND 5 / 93rd Street	9.9	130				*		*	1	130
35	3.01	Pembina 3	Pembina/Cavalier County Line	Intersection with ND 32 / 130th Avenue	3.0	109		*				*	1	109
36	11.01	Pembina 11	Intersection with ND 81 / 148th Avenue	Interchange with IH 29	12.1	90		*				*	1	90
37	1.05	Pembina 1	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.2	80			*			*	1	80
38	508.01	N/A	Intersection with 92nd Street (on west side of 127th Avenue)	Intersection with 92nd Street (on east side of 127th Avenue)	0.1	80			*			*	1	80
39	3.07	Pembina 3	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.1	65			*			*	1	65
40	1.06	Pembina 1	Intersection with NB IH 29 Ramps	Intersection with Old Highway 81	0.1	40			*			*	1	40
41	3.08	Pembina 3	Intersection with NB IH 29 Ramps	2624 feet east of interchange	0.5	35			*			*	1	35
42	505.01	N/A	SW to NE curve in trees	Intersection with 127th Avenue	0.5	70			*			*	0	70
43	4.02	Pembina 4	Intersection with ND 5	Intersection with 101st Street	5.0	130							1	130
44	6.01	Pembina 6	Intersection with 92nd Street (on east side of 127th Avenue)	Intersection with ND 5 / 93rd Street	1.0	80							1	80
45	506.01	N/A	1460 feet south of 93rd Street	Intersection with 93rd Stree	0.9	5							0	5
					Tota % That Ge	al Stars ets Star	22 49%	11 24%	20 44%	11 24%	18 40%			

	#	%	%
****	0	0%	0%
****	3	7%	5%
***	7	16%	17%
**	17	38%	43%
*	15	33%	32%
	3	7%	4%
	45	100%	100%

Stars

ADT Range | If segment has an ADT in the range of most at risk ADT based on Northeast totals. (150 < ADT < 500)

Lane Departure Density | If segment has higher lane departure density than the Northeast average (0.032).

Access Density | If segment has access density than the nationwide average (8).

Curve Critical Radius Density | If segment has higher density of curves with critical radius than the Northeast average (0.084).

Edge Risk Assessment | Edge risk of 2 or 3, based on assessment of nadway edge and clear zone.

HIGHWAY SAFETY IMPRONOTH Dakota Department of Transposers 55N 59959 (06-2011)		(HSIP) PROJ	ECT APP	LICATIO	ON			
	ina 55 from Domk	sina/Cavalia	r Count	v Lino t	o Into	reaction w	vith Delano Ave (in Walhalla)	_
Agency Name: P		Jilia/Cavalle		District: (Section w	vitii Delalio Ave (iii Walilalia)	
Contact Name: T	•	т	elephone i			1208		
Email Address: p	•		elepitorie i	vuilibei.	101-203-	4200		
Please attach a location map(s). You ma		ther describe your p	roject.					
Location Description		,	<u> </u>					
							SHSP Emphasis Area (check all that apply)	
	embina/Cavalier County Lintersection with Delano Ave	Lane Width: Speed Limit:				cohol Impaired Di		
Facility Type: 2-		Shoulder Width:				river/Older Driver	Restraints for all Occupants or Safety	
ADT: 37	75	Shoulder Type:	Paved		Curb Aggre	essive Driving	·	
Road Type R		Length (miles):					Lane Departure Crashes	
County Road Po	embina 55	Rumble Installed:	NO			ersection Safety	dical Capabilities to Increase Survivability	
						,		
Describe Current Safety Issues	& Systemic Ranking Re							
North Dakota Crashes, 2008 - 2012		5	years		Berther	80000	THE PART OF THE PA	
	Total	Road Dept	K+A		1000t Birest	(north/south ascilo	NAME OF TAXABLE PARTY.	
Crashes	0	0	0	-				
Density (per mile per year)	0.00 0.00	0.00 0.00	0.00 0.00				and the state of t	
Rate (per MVM)	0.00	0.00	0.00	-	BOUL			
						-		
ADT Range	Value 375	Critical 150≤ADT≤500	Road	-		A Section		
RD Density	0.000	0.032	*			4.10		
Access Density	19.6	8.0	*					
Curve Critical Radius Density	0.853	0.084	*		WGS-84			
Edge Risk	2	2 or 3	****	-	Market Control		SRF	
			^^^					
Describe Proposed Safety Impr	ovements							
	Description	Type	Cost per mi	Miloago	Cost	Notes Noises	sensitive. Curve projects suggested on other sheets.	
-	4" Edge Lines	Proactive	\$400	1.2	\$480	_ Notes - Noise s	sensitive. Curve projects suggested on other sneets.	
	6" Edge Lines	Proactive	\$650	0.0	\$0			
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0			
Ground	In Wet-Reflective Markings Center Line Rumble Strip	Proactive Proactive	\$8,500 \$3,000	0.0 0.0	\$0 \$0			
	6" Center Line	Proactive	\$650	0.0	\$0			
				_				
Project Cost Estimate (attach d	етанеа сору)			Propose	d Year o	f Constructio	on	
	Federal Funds	\$432						
Local Match	(10% of Total project cost)	\$48	_					
	Total Project Cost	\$480						
NDDOT Central Office Only								
	Yes □No R	eference Number				ID Number		
Votes								
							Dogo: 4	_
						Sec	Page: 1 gment ID: 55.01	
							Date: 10/23/2013	

HIGHWAY SAFETY IMPROV North Dakota Department of Transpor SFN 59959 (06-2011)		(HSIP) PROJ	ECT APP	LICATIO	ON		
SFN 59959 (06-2011)	Domhina	1 from Bath	nato wo	et city	limit t	o Rathgat	e east city limit
A manay Namay Da		i iioiii batii	MD DOT			o battigat	e east city mint
Agency Name: Pe	•	-				4200	
Contact Name: Tr	•		elephone i	vumber:	/01-205-	4208	
Email Address: pe Please attach a location map(s). You may		ther describe your p	roject				
Location Description	y use additional sheets to ful	iner describe your p	roject.				
2004.02000							SHSP Emphasis Area (check all that apply)
	thgate west city limit	Lane Width:			Reduce Ald	cohol Impaired D	
	thgate east city limit	Speed Limit:					Restraints for all Occupants
Facility Type: 2-L ADT: 24		Shoulder Width:				river/Older Driver essive Driving	or Safety
Road Type Ru		Shoulder Type: Length (miles):					ane Departure Crashes
County Road Pe		Rumble Installed:					dical Capabilities to Increase Survivability
					Improve In	tersection Safety	
Describe Comment Cafety Issues	9 Custamia Dankina D						
Describe Current Safety Issues of North Dakota Crashes, 2008 - 2012	& Systemic Ranking R		years				
NOTHI DAROIA CIASHES, 2000 - 2012		3	years		Charithan	2000	CHARLES CONTRACTOR OF THE CONT
	Total	Road Dept	K+A		10146 Street		
Crashes	0	0	0	•			
Density (per mile per year)	0.00	0.00	0.00				
Rate (per MVM)	0.00	0.00	0.00	-			
						+	
						1 76	
	Value	Critical	Road		-		I do not see to the second
ADT Range	240	150≤ADT≤500	*				
RD Density Access Density	0.000 28.5	0.032 8.0	+				
Curve Critical Radius Density	3.880	0.084	*		mee in		
Edge Risk	2	2 or 3	*		N 48.8773683		COC
			****		THE REAL PROPERTY.		
Describe Proposed Safety Impro	ovements						
sescribe i roposed darety impre	overnents						
	Description	Type	Cost per mi	Mileage	Cost	Notes - Qualific	ies for edge line rumble. Consider combining projects with segments 1.02 and
	4" Edge Lines	Proactive	\$400	0.0	\$0		ojects suggested on other sheets.
	6" Edge Lines	Proactive	\$650	0.0	\$0		
Ground I	Edge Rumble Strip in Wet-Reflective Markings	Proactive Proactive	\$3,500 \$8,500	0.0	\$0 \$0		
Ground 1	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0		
	6" Center Line	Proactive	\$650	0.0	\$0	_	
Duning 1 On a 1 Fatimanta (attack da	. (-! \			D	-/ V	f O(:	
Project Cost Estimate (attach de	етанев сору)			Propose	a Year o	f Constructio	011
	Federal Funds	\$0					
Local Match	(10% of Total project cost)	\$0	_				
	Total Project Cost	\$0					
AIDDOT O							
NDDOT Central Office Only	Yes □No F	teference Number	ı			ID Number	
Project Accepted?	103 🗖 100	tererence rannber				ID Number	
							Page: 2
						Sed	gment ID: 2
							Date: 10/23/2013

HIGHWAY SAFETY IMPROVING THE DAKOTA DEPARTMENT OF TRANSPORTS SFN 59959 (06-2011)		(HSIP) PROJ	ECT APP	LICATIO	ON						
	nbina 12 from In	tersection v	vith ND	5 / 93rd	Stree	et to Inters	section with 101st Street				
Agency Name: Pembina County ND DOT District: 6											
Contact Name: Tro		Т			umber: 701-265-4208						
Email Address: per	nbhwy@nd.gov		•								
Please attach a location map(s). You may	use additional sheets to fur	ther describe your p	roject.								
Location Description				_							
Start: Into	reaction with ND F / 02rd (Long Width	10'		Daduas Al		SHSP Emphasis Area (check all that apply)				
	rsection with ND 5 / 93rd (rsection with 101st Street	Lane Width: 12' Speed Limit: High		□ Reduce Alcohol Impaired Driving □ Increase the Use of Safety Restraints for all Occupants							
Facility Type: 2-Lane		Shoulder Width: 2'		☐ Younger Driver/Older Driver Safety							
ADT: 409		Shoulder Type: Paved				essive Driving					
Road Type Rura County Road Perr		Length (miles): 7.1 Rumble Installed: No		☐ Improvements to Address Lane Departure Crashes							
County Road Peri	IDINA 12	Rumble installed.		 □ Enhancing Emergency Medical Capabilities to Increase Survivability □ Improve Intersection Safety 							
					•		•				
Describe Current Safety Issues &	Systemic Ranking R										
North Dakota Crashes, 2008 - 2012		5	years		Deciden	BEAGA.	MARIA SIA				
	Total	Road Dept	K+A		TREETING PARKETS	Palaters m	CHAINCALL CONTRACTOR				
Crashes	5	2	0	-							
Density (per mile per year)	0.14	0.06	0.00		- 1						
Rate (per MVM)	0.94	0.38	0.00	-		1	TO THE OWNER OF THE OWNER OWNER OF THE OWNER OWNER OF THE OWNER OW				
						The same of the sa					
					4		7.40				
	Value	Critical	Road	_		4					
ADT Range	409	150≤ADT≤500	*								
RD Density Access Density	0.057 8.1	0.032 8.0	*								
Curve Critical Radius Density	0.141	0.084	*		WISSA						
Edge Risk	1	2 or 3		-	N 48.8077717		EPE				
			****			×					
Describe Proposed Safety Improv	vements										
,											
	Description	Туре	Cost per mi		Cost	Notes - Qualifie	ies for edge line rumble. Intersection projects suggested on other sheets.				
	4" Edge Lines 6" Edge Lines	Proactive	\$400	0.0	\$0 \$0						
	Edge Rumble Strip	Proactive Proactive	\$650 \$3,500	0.0	\$0 \$0						
Ground In	Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0						
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0						
	6" Center Line	Proactive	\$650	0.0	\$0	_					
Project Cost Estimate (attach det	ailed copy)			Propose	d Year c	of Constructio	on				
L. J. Marcil (Federal Funds	\$0									
Local Match (1	10% of Total project cost) Total Project Cost	\$0 \$0	-								
	Total Froject Cost	ΨΟ									
NDDOT Central Office Only											
Project Accepted?	es 🗆 No R	eference Number				ID Number					
Notes											
							Page: 3				
						Sec	Page: 3 egment ID: 12.03				
						308	Date: 10/23/2013				

HIGHWAY SAFETY IMPROVE North Dakota Department of Transporta SFN 59959 (06-2011)		(HSIP) PROJ	ECT APP	LICATIO	ON						
, , , , , , , , , , , , , , , , , , , ,	N/A from Inte	ersection wi	th 3rd A	venue	to Inte	rsection v	with 142nd Avenue				
Agency Name: Pembina County ND DOT District: 6											
Contact Name: Tro		T	elephone N			4208					
Email Address: pen		_									
Please attach a location map(s). You may u		ther describe your p	roject.								
Location Description											
							SHSP Emphasis Area (check all that apply)				
Start: Intersection with 3rd Avenue		Lane Width: '		Reduce Alcohol Impaired Driving							
	section with 142nd Avenu	Speed Limit: Low Shoulder Width: 0'		☐ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety							
Facility Type: 2-Lane ADT: 280		Shoulder Type: None		☐ Curb Aggressive Driving							
Road Type Rura	l Paved	Length (miles): 0.5		☐ Improvements to Address Lane Departure Crashes							
County Road N/A		Rumble Installed: No			Enhancing	Emergency Med	dical Capabilities to Increase Survivability				
					Improve In	tersection Safety					
Describe Current Safety Issues &	Systemic Panking D	oviou									
North Dakota Crashes, 2008 - 2012	Systemic Name in		years								
Votti Dakota Grasiles, 2000 - 2012		3	years		Pombles	20021	CHIMPSL				
	Total	Road Dept	K+A		C Deed						
Crashes	0	0	0	=							
Density (per mile per year)	0.00	0.00	0.00								
Rate (per MVM)	0.00	0.00	0.00	-							
					MC-Attack	-William					
					AL U.S.	国际基础	and the first of the second of				
	Value	Critical	Road	_							
ADT Range	280	150≤ADT≤500	*								
RD Density	0.000	0.032	_								
Access Density Curve Critical Radius Density	26.0 0.000	8.0 0.084	*								
Edge Risk	2	2 or 3	*		N 46.794046						
<u> </u>			***	-	W 97 611786		ISRF				
Describe Proposed Safety Improv	ements										
	Description	Type	Cost per mi	Mileage	Cost	Notes - Edge li	ine cost includes 4" centerline marking. Qualifies for edge line rumble.				
	4" Edge Lines	Proactive	\$400	1.0	\$400	_ Notes - Lage II	ine cost includes 4 Centerline marking. Qualifies for edge line fumble.				
	6" Edge Lines	Proactive	\$650	0.0	\$0						
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0						
	Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0						
C	Center Line Rumble Strip 6" Center Line	Proactive Proactive	\$3,000 \$650	0.0 0.0	\$0 \$0						
	0 Center Line	Tioactive	ψοσο	0.0	ΨΟ	_					
Project Cost Estimate (attach deta	ailed copy)			Propose	d Year o	f Constructio	on				
•											
Land Matak (4	Federal Funds	\$360									
Local Match (1	0% of Total project cost) Total Project Cost	\$40 \$400	-								
	Total Troject Cost	Ψ+00									
NDDOT Central Office Only											
Project Accepted?	s □No R	eference Number				ID Number					
Notes											
							Page: 4				
						Seg	gment ID: 510.01				
							Date: 10/23/2013				

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION North Dakota Department of Transportation Programming SFN 59959 (06-2011) Pembina 1 from Bathqate east city limit (could be intersection with 148th Avenue) to Intersection with SB IH 29 Ramps **Agency Name: Pembina County** ND DOT District: 6 **Contact Name: Troy Kittelson** Telephone Number: 701-265-4208 Email Address: pembhwy@nd.gov Please attach a location map(s). You may use additional sheets to further describe your project. Location Description SHSP Emphasis Area (check all that apply) Start: Bathgate east city limit (could Lane Width: 12' Reduce Alcohol Impaired Driving End: Intersection with SB IH 29 Ra Speed Limit: High Increase the Use of Safety Restraints for all Occupants Facility Type: 2-Lane Shoulder Width: 0' Younger Driver/Older Driver Safety ADT: 200 Shoulder Type: None Curb Aggressive Driving Road Type Rural Paved Length (miles): 10.7 7 Improvements to Address Lane Departure Crashes County Road Pembina 1 Rumble Installed: No Enhancing Emergency Medical Capabilities to Increase Survivability Improve Intersection Safety Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012 Total Road Dept K+A Crashes 5 3 0 0.00 Density (per mile per year) 0.09 0.06 Rate (per MVM) 0.00 Critical Value Road ADT Range 150≤ADT≤500 RD Density 0.056 0.032 Access Density 8.0 Curve Critical Radius Density 0.000 0.084 Edge Risk 2 or 3 Describe Proposed Safety Improvements Туре Cost per mi Cost Notes - Qualifies for edge line rumble. Intersection projects suggested on other sheets. 4" Edge Lines Proactive \$400 0.0 \$0 6" Edge Lines \$650 0.0 \$0 Proactive Edge Rumble Strip Proactive \$3,500 0.0 \$0 Ground In Wet-Reflective Markings Proactive \$8,500 0.0 \$0 Center Line Rumble Strip \$3,000 0.0 \$0 Proactive 6" Center Line Proactive \$0 Project Cost Estimate (attach detailed copy) Proposed Year of Construction \$0 Local Match (10% of Total project cost) Total Project Cost \$0 NDDOT Central Office Only ☐ No Reference Number ID Number Project Accepted? Page Segment ID: 1.04 Date: 10/23/2013

HOLIMAY CAFETY IMPROVE	MENT DROOP AM	(LICID) DDO I	FOT ADD	LICATI	DN				
HIGHWAY SAFETY IMPROVE North Dakota Department of Transporta SFN 59959 (06-2011)		(HSIP) PROJ	ECT APP	LICATIO	N				
	Pembina 12 f	rom Pembi	na / Wal	sh Cou	ınty Liı	ne to Intersect	tion with ND 6	6	
Agency Name: Pen			ND DOT						
Contact Name: Tro	y Kittelson	Т	elephone I	Number:	701-265-	4208			
Email Address: pen									
Please attach a location map(s). You may u	use additional sheets to fur	ther describe your p	roject.						
Location Description				1		CHCD	Emphasia Area (sheek (all that apply)	
Start: Pem	bina / Walsh County Line	Lane Width	: 12'		Reduce Alc	ohol Impaired Driving	Emphasis Area (check a	ан тпат арріу)	
End: Inter	section with ND 66	Speed Limit	: High		Increase th	e Use of Safety Restrain	ints for all Occupants		
Facility Type: 2-La	ne	Shoulder Width				river/Older Driver Safety	у		
ADT: 193	l Doyard	Shoulder Type Length (miles)				essive Driving	b		
Road Type Rura County Road Pem		Rumble Installed				nts to Address Lane De Emergency Medical Ca	eparture Crasnes apabilities to Increase St	urvivability	
2229						ersection Safety		,	
	0 1 1 5 11 5								
Describe Current Safety Issues & North Dakota Crashes, 2008 - 2012	Systemic Ranking Re		· vooro						
North Dakota Crasnes, 2008 - 2012			years		Providen	TOTAL PORT OF THE PARTY OF THE	Cutton		
	Total	Road Dept	K+A		THE ROOM	penistressary.			
Crashes	2	2	1	-	1000				
Density (per mile per year)	0.10	0.10	0.05						
Rate (per MVM)	1.42	1.42	0.71	-	_				
	Value	Critical	Road	_			-4		
ADT Range	193	150≤ADT≤500	*		SE HOLD	nd and Marine	The state of the s		
RD Density Access Density	0.100 8.0	0.032 8.0	*		A		ALL DESCRIPTION OF THE PERSON NAMED IN		
Curve Critical Radius Density	0.000	0.084			under v				
Edge Risk	2	2 or 3	*	_	N AN SEASON		CDC		
			***		HAR THE LOND				
Describe Proposed Safety Improv	rements								
	Description	Type	Cost per mi		Cost	Notes - Edge line cost	st includes 4" centerline	marking. Qualifies for	edge line rumble.
	4" Edge Lines	Proactive	\$400 \$650	8.0	\$3,200				
	6" Edge Lines Edge Rumble Strip	Proactive Proactive	\$3,500	0.0	\$0 \$0				
Ground In	Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0				
(Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0				
	6" Center Line	Proactive	\$650	0.0	\$0	_			
Project Cost Estimate (attach deta	ailed copy)			Propose	ed Year o	f Construction			
				.,,					
	Federal Funds	\$2,880							
Local Match (1	0% of Total project cost) Total Project Cost	\$320 \$3,200	-						
	Total Floject Cost	\$3,200							
NDDOT Central Office Only									
Project Accepted?	s □No R	eference Number				ID Number			
Votes									
						Pag Segment I		6 12.01	
						Segment i Dat		10/23/2013	

HIGHWAY SAFETY IMPRO		(HSIP) PROJ	ECT APP	LICATIO	ON							
SFN 59959 (06-2011)	NI/A from 124E	foot oouth a	4 NID E 4	a lotar			h Ctrast / Main Ctrast					
A No 5		reet south c				ı witti 97ti	h Street / Main Street					
Agency Name: F Contact Name: T	•	т		OT District: 6 ne Number: 701-265-4208								
	pembhwy@nd.gov		elepilolie i	Tullibel.	701-203-4	200						
Please attach a location map(s). You m		ther describe your p	roject.									
Location Description												
0:	345 feet south of ND 5	Lane Width:	,		D. I		SHSP Emphasis Area (check all that a	apply)				
	ntersection with 97th Street /	Speed Limit:				ohol Impaired Di Use of Safety F	Restraints for all Occupants					
Facility Type: 2	-Lane	Shoulder Width:	0'		Younger Dri	iver/Older Driver	r Safety					
ADT: 1 Road Type R		Shoulder Type: Length (miles):	None			ssive Driving						
County Road N		Rumble Installed					ane Departure Crashes lical Capabilities to Increase Survivabi	lity				
						ersection Safety						
Describe Current Safety Issues	e Customia Banking B	aviou.										
North Dakota Crashes, 2008 - 2012	s & Systemic Ranking R		years									
,			,		Pombles	Minutes .	TO THE PARTY OF TH					
	Total	Road Dept	K+A	_	Horth	o & 10000 Avenue						
Crashes Density (per mile per year)	0 0.00	0 0.00	0 0.00									
Rate (per MVM)	0.00	0.00	0.00									
				•								
	Value	Critical	Road									
ADT Range	190	150≤ADT≤500	*	•								
RD Density	0.000	0.032			-	4	•					
Access Density Curve Critical Radius Density	9.0 0.000	8.0 0.084	*				0.01					
Edge Risk	2	2 or 3	*	_	N 48 8030833		REDE					
			***		W 97-22 (9000)		SKI					
Describe Proposed Safety Impl	rovements											
_	Description 4" Edge Lines	Type Proactive	Cost per mi \$400	Mileage 3.0	\$1,200	Notes - Edge li	ine cost includes 4" centerline marking	g. Qualifies for edge line rumble.				
	6" Edge Lines	Proactive	\$650	0.0	\$1,200							
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0							
Ground	In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0 ©0							
	Center Line Rumble Strip 6" Center Line	Proactive Proactive	\$3,000 \$650	0.0 0.0	\$0 \$0							
						_						
Project Cost Estimate (attach o	detailed copy)			Propose	d Year of	Constructio	on					
	Federal Funds	\$1,080										
Local Matc	h (10% of Total project cost)	\$120	_									
	Total Project Cost	\$1,200										
NDDOT Central Office Only												
Project Accepted?	☐Yes ☐ No R	eference Number				ID Number						
Notes												
							Page:	7				
						Seg	gment ID:	511.01				
							Date:	10/23/2013				

HIGHWAY SAFETY IMPROVE North Dakota Department of Transportat SFN 59959 (06-2011)		(HSIP) PROJ	ECT APP	LICATIO	ON	
	with 160th Ave	enue to 101	3 feet ea	ast of i	nterch	hange (east of intersection with Old North Dakota 44)
Agency Name: Pem			ND DOT			iango (basi or interessentiri mar ora rtorar baneta 1.)
Contact Name: Troy	•	Т	elephone N			5-4208
Email Address: pem			•			
Please attach a location map(s). You may u	se additional sheets to fur	ther describe your p	roject.			
Location Description				1		OUOD Food of Association (1)
Start: Inters	ection with 160th Avenu	Lane Width:	. 1		Reduce Al	SHSP Emphasis Area (check all that apply) Alcohol Impaired Driving
	feet east of interchange	Speed Limit	Low		Increase th	the Use of Safety Restraints for all Occupants
Facility Type: 2-Lar	ie	Shoulder Width:				Driver/Older Driver Safety
ADT: 60 Road Type Rural	Payed	Shoulder Type Length (miles)				gressive Driving nents to Address Lane Departure Crashes
County Road N/A	raveu	Rumble Installed		_		g Emergency Medical Capabilities to Increase Survivability
						Intersection Safety
Describe Current Safety Issues &	Svotomio Bonkina B	oviou				
North Dakota Crashes, 2008 - 2012	Systemic Ranking R		years			
1011.1 Danoia Grasiles, 2000 2012			youro		Position	MINISTIE COMMIT
	Total	Road Dept	K+A		Bint	
Crashes	2 0.67	2	0			
Density (per mile per year) Rate (per MVM)	30.44	0.67 30.44	0.00 0.00			
(-		
	Value	Critical	Dood			m 1 2 50
ADT Range	Value 60	Critical 150≤ADT≤500	Road	-		
RD Density	0.727	0.032	*			
Access Density	20.0	8.0	*			
Curve Critical Radius Density	0.000	0.084			WGS-84	
Edge Risk	2	2 or 3	***	•	W 97 185218	ISRF
Describe Proposed Safety Improve	ements					
	Description	Туре	Cost per mi	Mileage	Cost	Notes - Intersection projects suggested on other sheets.
	4" Edge Lines	Proactive	\$400	0.0	\$0	Notes - Intersection projects suggested on other sneets.
	6" Edge Lines	Proactive	\$650	0.0	\$0	
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
	Vet-Reflective Markings enter Line Rumble Strip	Proactive Proactive	\$8,500 \$3,000	0.0	\$0 \$0	
Č	6" Center Line	Proactive	\$650	0.0	\$0	
						_
Project Cost Estimate (attach deta	iled copy)			Propose	ed Year o	of Construction
	Federal Funds	\$0				
Local Match (10	0% of Total project cost)	\$0	_			
	Total Project Cost	\$0				
NDDOT Central Office Only						
Project Accepted?	. □No R	eference Number	I			ID Number
Votes			L			
						Page: 8
						Segment ID: 502.01 Date: 10/23/2013

HIGHWAY SAFETY IMPRO North Dakota Department of Transp SFN 59959 (06-2011)		(HSIF) FRO	DECT AFF	LICATIO	IN						
	N/A fro	m Pembin	a north c	ity limit	to 467	70 feet n	orth of N	D 59			
Agency Name:	Pembina County			District: 6							
Contact Name:		-	Telephone	Number: 7	01-265-42	208					
	pembhwy@nd.gov		-								
Please attach a location map(s). You n	nay use additional sheets to fur	ther describe your	project.								
Location Description				1			CUCD Empho	sis Area (check	all that appli	a)	
Start:	Pembina north city limit	Lane Width	n: '	□R	educe Alco	hol Impaired D		sis Area (checi	ali that appi	y)	
End:	4670 feet north of ND 59	Speed Limi	t: Low	□ In	crease the	Use of Safety	Restraints for	all Occupants			
Facility Type:		Shoulder Width				er/Older Drive	er Safety				
ADT: :	29 Rural Paved	Shoulder Type Length (miles				sive Driving ts to Address L	ane Denartur	- Crashes			
County Road		Rumble Installe						es to Increase	Survivability		
				□ In	nprove Inte	rsection Safety	, ·				
Describe Current Safety Issue	s & Systemic Ranking R	eview									
North Dakota Crashes, 2008 - 2012	3 & Oysternie Ranking R		5 years								
			•		PostilAna	1000	100LIPG	CHERNIAL			
Crashes	Total 0	Road Dept 0	K+A 0	_	HOTEL .						
Crashes Density (per mile per year)	0.00	0.00	0.00								
Rate (per MVM)	0.00	0.00	0.00	_							
							-	-			
	Value	Critical	Road			T					
ADT Range	29	150≤ADT≤500		- 1	and the last	1					
RD Density	0.000	0.032						ALC:			
Access Density Curve Critical Radius Density	9.0 2.259	8.0 0.084	*								
Edge Risk	2	2 or 3	*		NGS-84 N 48.9782583			arrive and the second			
			***		N 97.2429950			SKF			
Describe Proposed Safety Imp	provements										
,											
-	Description 4" Edge Lines	Type	Cost per mi \$400			Notes -					
	4 Edge Lines 6" Edge Lines	Proactive Proactive	\$400 \$650	0.9 0.0	\$360 \$0						
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0						
Groun	d In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0						
	Center Line Rumble Strip 6" Center Line	Proactive Proactive	\$3,000 \$650	0.0 0.0	\$0 \$0						
-	0 Center Line	1 Toactive	ΨΟΟΟ	0.0	ΨΟ						
Project Cost Estimate (attach	detailed copy)			Proposed	Year of	Construction	on				
	Federal Funds	\$324									
Local Mate	ch (10% of Total project cost)	\$36									
	Total Project Cost	\$360	_								
NDDOT Central Office Only											
	□Yes □No R	eference Number			I	ID Number	l				
Votes						is manibol	ı				
						0-	Page:			9 514.02	
						Se	gment ID:			314.02	

HIGHWAY SAFETY IMPROVE North Dakota Department of Transporta SFN 59959 (06-2011)		(HSIP) PROJ	ECT APP	LICATIO	NC		
	na 55 from Inters	section with	ND 18 /	144th	Avenu	e to Interd	change with IH 29 SB Ramps
Agency Name: Pen			ND DOT				3
Contact Name: Tro	y Kittelson	Т	elephone I	Number:	701-265-4	4208	
Email Address: pen	nbhwy@nd.gov		-				
Please attach a location map(s). You may	use additional sheets to fur	ther describe your p	roject.				
Location Description				1			0.000
Start: Inter	section with ND 18 / 144t	Lane Width:	12'		Paduca Alc	ohol Impaired Di	SHSP Emphasis Area (check all that apply)
	change with IH 29 SB Ra	Speed Limit					Restraints for all Occupants
Facility Type: 2-La		Shoulder Width:	2'		Younger Dr	river/Older Driver	
ADT: 366	10	Shoulder Type:				ssive Driving	
Road Type Rura County Road Pem		Length (miles): Rumble Installed:					Lane Departure Crashes dical Capabilities to Increase Survivability
County Road Fem	ibilia 55	rumble mstalled	140			ersection Safety	
Describe Current Safety Issues &	Systemic Ranking Re						
North Dakota Crashes, 2008 - 2012		5	years		Thente		COST TAXA
	Total	Road Dept	K+A		DOMESTICAL	- Marie	CHIMICAL
Crashes	16	7	0	•	EMM		
Density (per mile per year)	0.23	0.10	0.00				
Rate (per MVM)	1.70	0.74	0.00				
							The second secon
	Value	Critical	Road	_			
ADT Range	366	150≤ADT≤500	*			m. 500	- Annual Control of the Control of t
RD Density Access Density	0.099 5.8	0.032 8.0	*				Section in Concession in Conce
Curve Critical Radius Density	0.283	0.084	*		meaning!		
Edge Risk	1	2 or 3		_	AL RELIANCE COM		CDC
			***		Back Park I		NC.
Describe Proposed Safety Improv	vements						
seconder reposed earery impre-	Cinionto						
	Description	Type	Cost per mi		Cost	Notes - Qualifie	ies for edge line rumble. Curve and intersection projects suggested on other
	4" Edge Lines	Proactive	\$400	0.0	\$0	sheets.	
	6" Edge Lines Edge Rumble Strip	Proactive	\$650	0.0	\$0 \$40.350		
Ground In	Wet-Reflective Markings	Proactive Proactive	\$3,500 \$8,500	14.1 0.0	\$49,350 \$0		
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0		
	6" Center Line	Proactive	\$650	0.0	\$0	_	
Project Cost Estimate (attach det	ailed conv)			Pronose	nd Vear o	f Constructio	200
Toject Cost Estimate (attach act	инси сору)			l	u rear o	Constructio	<i></i>
	Federal Funds	\$44,415					
Local Match (1	0% of Total project cost)	\$4,935	_				
	Total Project Cost	\$49,350					
NDDOT Central Office Only				<u>I</u>			
Project Accepted?	es 🗆 No R	eference Number				ID Number	
Notes							
	·						Page: 10
						Seg	gment ID: 55.03 Date: 10/23/2013

HIGHWAY SAFET		/EMENT PROGRAM	(HSIP) PROJ	ECT APP	LICATIO	ON				
FN 59959 (06-2011)										
		N/A from Inter	section with	n 160th .	Avenue	e to In	tersection	with 160th Avenue		
Agenc	y Name: Pe	embina County		ND DOT	District:	6				
Contac	t Name: Tr	roy Kittelson	Т	elephone l	Number:	701-265	4208			
Email A	Address: pe	embhwy@nd.gov								
		y use additional sheets to fur	her describe your p	roject.						
ocation Description										
	Stort: Int	tersection with 160th Avenu	Lane Width:	. 1		Poduco Al	S cohol Impaired Dri	HSP Emphasis Area (check all that a	apply)	
		tersection with 160th Avenu	Speed Limit:					Restraints for all Occupants		
Fa	cility Type: 2-l		Shoulder Width:	: 0'		Younger D	river/Older Driver	Safety		
_	ADT: 20		Shoulder Type:	: None			essive Driving			
	Road Type Ru		Length (miles): Rumble Installed					ane Departure Crashes cal Capabilities to Increase Survivabi	III.	
Co	unty Road N/	A	Rumble installed	. INO			tersection Safety	cal Capabilities to increase Survivable	iiity	
							,			
		& Systemic Ranking Re								
orth Dakota Crashes, 200	18 - 2012		5	years						
		Total	Road Dept	K+A		C	POHQ11	OL.PQ		
	Crashes	1	0	0	=	Esec				
Density (per mile		0.40	0.00	0.00						
Rate	(per MVM)	54.79	0.00	0.00	-	8	-	- B		
						-				
		Value	Critical	Road						
	DT Range	20	150≤ADT≤500		='			The v		
	RD Density ss Density	0.000 22.0	0.032 8.0							
Curve Critical Radi		0.000	0.084	*		The same of				
	Edge Risk	3	2 or 3	*		N 48.760245		-cor		
				**		W 97,214416	<i>e</i> -	SRE		
Describe Proposed S	afoty Impr	ovements								_
escribe i roposeu s	arety impre	overnents								
		Description	Type	Cost per mi	Mileage	Cost	Notes -			
		4" Edge Lines	Proactive	\$400	0.0	\$0	_			
		6" Edge Lines	Proactive	\$650	0.0	\$0				
	Ground	Edge Rumble Strip In Wet-Reflective Markings	Proactive Proactive	\$3,500 \$8,500	0.0	\$0 \$0				
	Ciodila	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0				
		6" Center Line	Proactive	\$650	0.0	\$0	_			
Project Cost Estimate	o (ottoob de	atailed samu			Dranage	d Voor	of Construction			_
Tojeci Cosi Estimate	e (allacii ue	етапей сору)			Propose	u rear c	or Construction	1		
		Federal Funds	\$0							
	Local Match	(10% of Total project cost)	\$0	_						
		Total Project Cost	\$0							
IDDOT Central Office	o Only									
roject Accepted?		Yes □No R	eference Number				ID Number			
otes										
								Page:	11	
							Seg	ment ID:	507.01	
								Date:	10/23/2013	

IIGHWAY SAFETY IMPROVE orth Dakota Department of Transporta		(HSIP) PROJ	ECT APP	LICATIO	ON		
FN 59959 (06-2011)	Dombina 2 from	n "V" Intore	oction	vith ND	5 to 1	Intersection with 107th Avenue	-
Aganay Nama, Ban		ii i iiileis	ND DOT			intersection with 107th Avenue	
Agency Name: Pen	•	-				E 4200	
Contact Name: Troy			elephone I	number:	/01-200	5-4208	
Email Address: perr lease attach a location map(s). You may u		har dagariha yayr m	rainat				
ocation Description	use additional sneets to full	ner describe your p	roject.				
ocation Description				I		SHSP Emphasis Area (check all that apply)	
Start: "Y" Ir	ntersection with ND 5	Lane Width:	12'		Reduce Al	Alcohol Impaired Driving	
	section with 107th Avenu	Speed Limit				e the Use of Safety Restraints for all Occupants	
Facility Type: 2-Lar	ne	Shoulder Width:	: 0'	`	Younger D	r Driver/Older Driver Safety	
ADT: 363		Shoulder Type				gressive Driving	
Road Type Rura		Length (miles)				ments to Address Lane Departure Crashes	
County Road Pemi	bina 2	Rumble Installed	: NO			ng Emergency Medical Capabilities to Increase Survivability Intersection Safety	
					improve ii	Intersection Salety	
Describe Current Safety Issues &	Systemic Ranking Re	eview					
orth Dakota Crashes, 2008 - 2012	-,		years				_
			•		Panishe	(MACHILLPS COMMIL	
	Total	Road Dept	K+A	_	PRODUCTION OF THE PROPERTY OF		
Crashes	2	0	1			and the second s	
Density (per mile per year)	0.04	0.00	0.02				
Rate (per MVM)	0.28	0.00	0.14	-		The state of the s	
						The state of the s	
						The state of the s	
	Value	Critical	Road				
ADT Range	363	150≤ADT≤500	*	-			
RD Density	0.000	0.032			THE REAL PROPERTY.	THE RESERVE OF THE PERSON NAMED IN COLUMN TWO	
Access Density	5.8	8.0					
Curve Critical Radius Density	0.000	0.084			WG5-84		
Edge Risk		2 or 3		•	W 97 621936	SRE	
Pescribe Proposed Safety Improv	rements						
	Description	Туре	Cost per mi		Cost	Notes - Qualifies for edge line rumble. Intersection projects suggested on other sheets.	
	4" Edge Lines	Proactive	\$400	0.0	\$0		
	6" Edge Lines Edge Rumble Strip	Proactive Proactive	\$650 \$3,500	0.0 0.0	\$0 \$0		
Ground In 1	Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0		
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0		
	6" Center Line	Proactive	\$650	0.0	\$0	<u></u>	
				_			
Project Cost Estimate (attach deta	анеа сору)			Propose	d Year o	r of Construction	
	Federal Funds	\$0					
Local Match (1	0% of Total project cost)	\$0					
	Total Project Cost	\$0	_				
	<u> </u>						
IDDOT Central Office Only							
roject Accepted?	s □No R	eference Number				ID Number	
otes							
						Page: 12	
						Segment ID: 2.01	
						Date: 10/23/2013	

IIGHWAY SAFETY IMPROV	EMENT PROGRAM	(HSIP) PROJ	ECT APP	LICATIO	ON			
orth Dakota Department of Transport FN 59959 (06-2011)	tation Programming							
Agency Name: Pe Contact Name: Tro Email Address: pe	mbina County oy Kittelson mbhwy@nd.gov	Т	ND DOT elephone N	District:	6		Bathgate west city limit	
lease attach a location map(s). You may ocation Description	use additional sheets to furt	her describe your p	roject.					
•							SHSP Emphasis Area (check all that apply)	
	5 ral Paved	Lane Width: Speed Limit: Shoulder Width: Shoulder Type: Length (miles): Rumble Installed:	High 0' None 3.3		Increase the Younger D Curb Aggre Improveme Enhancing	river/Older Driver essive Driving ents to Address La	Restraints for all Occupants r Safety ane Departure Crashes lical Capabilities to Increase Survivability	
Describe Current Safety Issues &	& Systemic Ranking Re							
orth Dakota Crashes, 2008 - 2012		5	years		Frankline	20004	CHANGE CHANGE	
Crashes Density (per mile per year) Rate (per MVM)	Total 0 0.00 0.00	0 0.00 0.00	K+A 0 0.00 0.00		101 of Wirest Writer	-		
ADT Range RD Density Access Density Curve Critical Radius Density	Value 265 0.000 7.9 0.000	Critical 150≤ADT≤500 0.032 8.0 0.084	Road ★					
Edge Risk	2	2 or 3	*	:	WGS-84 N 48 8770383 W 97 5 W803		SRE	
Describe Proposed Safety Impro	vements							
	Description 4" Edge Lines 6" Edge Lines Edge Rumble Strip n Wet-Reflective Markings Center Line Rumble Strip 6" Center Line	Type Proactive Proactive Proactive Proactive Proactive Proactive Proactive	Cost per mi \$400 \$650 \$3,500 \$8,500 \$3,000 \$650	Mileage 0.0 0.0 0.0 0.0 0.0 0.0	\$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0	_ Notes - Qualifie	es for edge line rumble. Intersection projects suggested on other s	heets.
Project Cost Estimate (attach de	tailed copy)			Propose	d Year o	f Constructio	on .	
,	Federal Funds (10% of Total project cost) Total Project Cost	\$0 \$0 \$0	-					
IDDOT Central Office Only roject Accepted?	yes □No R	eference Number	ı			ID Number		
otes [L]	LINO JA	erecence muniber	1			no number	Page: 13	
						Seg	rage. 13 gment ID: 1.02 Date: 10/23/2013	

HIGHWAY SAFETY IMPROVEI North Dakota Department of Transportati		(HSIP) PROJ	ECT APP	LICATIO	ON					
SFN 59959 (06-2011)	• • • •			241 4			141 NB 04	111011 1		
	3 from Intersect	tion with ND				o Intersectio	on with ND 81	/ 148th A	venue	
Agency Name: Pemi	•	-	ND DOT			4000				
Contact Name: Troy		10	elephone N	Number:	/01-265-	4208				
Email Address: peml Please attach a location map(s). You may us		her describe your p	roiect.							
Location Description	additional oneste to run	nor docume your p	10,000.							
•						SHS	SP Emphasis Area (ch	eck all that apply	y)	
	ection with ND 18 / 140t ection with ND 81 / 148t	Lane Width: Speed Limit:				cohol Impaired Drivin				
Facility Type: 2-Land		Shoulder Width:				river/Older Driver Sa	straints for all Occupar afety	ıs		
ADT: 264		Shoulder Type:	None		Curb Aggre	essive Driving	•			
Road Type Rural		Length (miles):				ents to Address Lane		0		
County Road Pemb	na 3	Rumble Installed:	: NO			tersection Safety	Capabilities to Increa	se Survivability		
Describe Current Safety Issues & S	Systemic Ranking Re									
North Dakota Crashes, 2008 - 2012		5	years		Bumbles	W8004509		eres		
	Total	Road Dept	K+A		E Cont					
Crashes	2	1	0	-						
Density (per mile per year) Rate (per MVM)	0.05 0.52	0.03 0.26	0.00 0.00							
Rate (per liviviii)	0.52	0.26	0.00	-						
	Makes	O-itiI	Deed		Table 1		umaka	122		
ADT Range	Value 264	Critical 150≤ADT≤500	Road ★	-	-	MINIS	1,001			
RD Density	0.025	0.032				1				
Access Density	5.0	8.0								
Curve Critical Radius Density Edge Risk	0.000 2	0.084 2 or 3	+		A FESSA DAM RESISTA			ie.		
Edge Wor			**	•	W 97 509638		IS	RF		
Describe Proposed Safety Improve										
Describe Froposed Salety Improve	ments									
	Description	Type	Cost per mi	Mileage	Cost	Notes - Qualifies for	or edge line rumble.			
	4" Edge Lines	Proactive	\$400	0.0	\$0 0 0					
	6" Edge Lines Edge Rumble Strip	Proactive Proactive	\$650 \$3,500	0.0	\$0 \$0					
Ground In W	Vet-Reflective Markings	Proactive	\$8,500	0.0	\$0					
Ce	enter Line Rumble Strip	Proactive	\$3,000	0.0	\$0					
	6" Center Line	Proactive	\$650	0.0	\$0	_				
Project Cost Estimate (attach detai	iled copy)			Propose	ed Year o	of Construction				
	Federal Funds	\$0								
Local Match (10	% of Total project cost)	\$0 \$0								
()	Total Project Cost	\$0	-							
AIDDOT On the LOSS of Control										
NDDOT Central Office Only Project Accepted? □ Yes	□No R	eference Number	T			ID Number				
Notes	LINO IX	elerence (valider	l			ID Number				
,			·			Segme	Page:		14 3.05	
							Date:	10	3.05 D/23/2013	

HIGHWAY SAFETY IMPROVE North Dakota Department of Transportat SFN 59959 (06-2011)		(HSIP) PROJ	ECT APP	LICATIO	DΝ			
	a 7 from Interse	ction with 1	27th Av	enue t	o Inter	section w	ith ND 32&66 / 129th	Avenue
Agency Name: Pem				District:				
Contact Name: Troy	•	Т	elephone I			4208		
Email Address: pem								
Please attach a location map(s). You may u		her describe your p	roject.					
Location Description								
							SHSP Emphasis Area (check all tha	t apply)
	section with 127th Avenu section with ND 32&66 /	Lane Width: Speed Limit:				cohol Impaired Di	riving Restraints for all Occupants	
Facility Type: 2-Lar		Shoulder Width:				river/Older Driver		
ADT: 198		Shoulder Type:	None		Curb Aggr	essive Driving	•	
Road Type Rural		Length (miles):					ane Departure Crashes	
County Road Pemb	oina /	Rumble Installed	: No			Emergency Med tersection Safety	lical Capabilities to Increase Surviva	ability
					inprove in	tersection datety		
Describe Current Safety Issues &	Systemic Ranking Re	eview						
North Dakota Crashes, 2008 - 2012		5	years					
	Total	Road Dept	ν . Λ		Postulities		CHEAT-CE CHEAT-CE	
Crashes	Total 1	0	K+A 0	-	Young		400	
Density (per mile per year)	0.10	0.00	0.00				walker.	
Rate (per MVM)	1.38	0.00	0.00					
							7.7	
						and the last	30	
	Value	Critical	Road				77	
ADT Range	198	150≤ADT≤500	*				-	
RD Density	0.000	0.032			-	-		
Access Density Curve Critical Radius Density	6.0 0.000	8.0 0.084			in order	"		
Edge Risk	2	2 or 3	*		WG5-84 N 48 584554			
<u> </u>			**	•			SRE	
Describe Proposed Safety Improve	amanta							
Describe Froposed Salety Improve	ements							
	Description	Type	Cost per mi	Mileage	Cost	Notes - Qualifie	es for edge line rumble.	
	4" Edge Lines	Proactive	\$400	0.0	\$0	_	· ·	
	6" Edge Lines	Proactive	\$650	0.0	\$0			
Ground In V	Edge Rumble Strip Wet-Reflective Markings	Proactive Proactive	\$3,500 \$8,500	0.0 0.0	\$0 \$0			
	enter Line Rumble Strip	Proactive	\$3,000	0.0	\$0			
	6" Center Line	Proactive	\$650	0.0	\$0	_		
Project Cost Estimate (attach data	iled conv)			Dronoss	d Voor o	f Canatruatio	Nm.	
Project Cost Estimate (attach deta	шеа сору)			Propose	u rear c	of Constructio)II	
	Federal Funds	\$0						
Local Match (10	0% of Total project cost)	\$0	_					
	Total Project Cost	\$0						
NDDOT Central Office Only								
Project Accepted?	s □No R	eference Number				ID Number		
Votes								
							Page:	15
						Seg	gment ID: Date:	7.01 10/23/2013
							Date.	10/20/2010

Pembina County Curves

									Crasi	hes							
Curve Count	ID	Corridor	Segment	Start	End	Curve Advisory Sign	Speed Advisory Sign	Chevrons	Total	к а	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Speed Limit	Risk Ranking	Notes
1	001A	1.03	Pembina 1	Bathgate west city limit	Bathgate east city limit	No	No	No	-		555	240	No	Yes	Low	**	No
2	001B	1.03	Pembina 1	Bathgate west city limit	Bathgate east city limit	No	No	No	-		215	240	No	No	Low		No
3	001C	1.03		Bathgate west city limit	Bathgate east city limit	No	No	No	-		150	240	No	Yes	Low	*	No
4	009A	9.01		Walhalla east city limit	Intersection with 135th Avenue	Yes	No	No	2		765	458	No	No	High	**	Curve Advisory Sign
5	009B	9.01	Pembina 9	Walhalla east city limit	Intersection with 135th Avenue	No	No	No	1		540	458	No	No	High	**	No
6	012A	12.02	Pembina 12	Intersection with ND 66	Intersection with ND 5 / 93rd Street	Yes	No	No	-		1100	130	No	No	High	*	Curve Advisory Sign
7	012B	12.02	Pembina 12	Intersection with ND 66	Intersection with ND 5 / 93rd Street	Yes	No	No	-		1500	130	No	No	High		Curve Advisory Sign
8	012C	12.03		Intersection with ND 5 / 93rd Street	Intersection with 101st Street	Yes	No	No	-		2050	409	No	No	High	*	Curve Advisory Sign
9	055A	55.01	Pembina 55	Pembina/Cavalier County Line	Intersection with Delano Ave (in Walhalla)	Yes	No	No	-		1040	375	No	No	Low	**	Reverse Curve
10	055B	55.02	Pembina 55	Intersection with ND 32 / 128th Aven	u Intersection with ND 18 / 144th Avenue	Yes	No	No	-		790	315	Yes	No	High	**	Winding Road
11	055C	55.02	Pembina 55	Intersection with ND 32 / 128th Aven	u Intersection with ND 18 / 144th Avenue	Yes	No	No	1		1100	315	No	No	High	*	Winding Road
12	055D	55.02			u Intersection with ND 18 / 144th Avenue	Yes	No	No	-		785	315	No	No	High	*	Winding Road
13	055E	55.03	Pembina 55	Intersection with ND 18 / 144th Aven	u Interchange with IH 29 SB Ramps	Yes	No	Yes	1		575	366	Yes	Yes	High	****	Curve Advisory Sign
14	055F	55.03	Pembina 55	Intersection with ND 18 / 144th Aven	u Interchange with IH 29 SB Ramps	Yes	No	Yes	4	1 -	575	366	Yes	Yes	High	****	Curve Advisory Sign
15	055G	55.03	Pembina 55	Intersection with ND 18 / 144th Aven	u Interchange with IH 29 SB Ramps	Yes	No	Yes	-		825	366	No	No	High	**	Reverse Curve
16	055H	55.03	Pembina 55	Intersection with ND 18 / 144th Aven	u Interchange with IH 29 SB Ramps	Yes	No	Yes	-		1000	366	No	No	High	**	Reverse Curve
17	509A	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-		240	29	No	No	High		No Photos/Streetview
18	509B	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-		200	29	No	No	High		No Photos/Streetviev
19	509C	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-		135	29	No	Yes	High	*	No Photos/Streetviev
20	509D	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-		90	29	Yes	Yes	High	**	No Photos/Streetviev
21	509E	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-		245	29	No	No	High		No Photos/Streetview
22	509F	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-		145	29	No	Yes	High	*	No Photos/Streetviev
23	509G	509.01	N/A	Intersection with ND 5 / 93rd Street	End of road	No Photos/Streetview			-		265	29	Yes	Yes	High	**	No Photos/Streetviev
24	514A	514.01	N/A	5280 feet north of 101st Street	Pembina south city limit	No Photos/Streetview			-		3800	75	Yes	No	High	*	No Photos/Streetview
25	514B	514.01	N/A	5280 feet north of 101st Street	Pembina south city limit	No Photos/Streetview			-		2220	75	Yes	No	High	*	No Photos/Streetview
26	514C	514.01	N/A	5280 feet north of 101st Street	Pembina south city limit	No Photos/Streetview			-		2100	75	No	No	High		No Photos/Streetview
27	514D	514.02	N/A	Pembina north city limit	4670 feet north of ND 59	No Photos/Streetview			-		1600	29	No	No	Low		No Photos/Streetviev
28	514E	514.02	N/A	Pembina north city limit	4670 feet north of ND 59	No Photos/Streetview			-		2900	29	No	No	Low		No Photos/Streetviev
29	518A	518.01	N/A	Intersection with 101st Street	Intersection with 107th Street	Yes	No	No	-		1800	275	No	No	High		Winding Road
30	518B	518.01	N/A	Intersection with 101st Street	Intersection with 107th Street	Yes	No	Yes	-		1200	275	Yes	No	High	**	Winding Road
31	518C	518.01	N/A	Intersection with 101st Street	Intersection with 107th Street	Yes	No	Yes	-		575	275	Yes	No	High	**	Winding Road
32	518D	518.01	N/A	Intersection with 101st Street	Intersection with 107th Street	Yes	No	Yes	_		1150	275	No	No	High	*	Winding Road

		Total							
Stars	#	%							
****	1	3%							
****	1	3%							
***	0	0%							
**	11	34%							
*	10	31%							
	9	28%							
	32	100%							

Critical Ranges	Min	Max
Radius	500	1,200
ADT	350	650

	6-2011													
		,	Agend Conta Email	cy Name ct Name Address	: Pembina Co : Troy Kittelso : pembhwy@i	unty on nd.gov			st city lim		gate east cit ND DOT District ephone Number	: 6	8	
			ap(s). You may (Corridor C		onal sheets to furting Curves)	ther describ	e your proje	ect.						
Star End Facility Type	: Batho	gate we gate ea ne Paved	est city limit ast city limit		L S Shou Sho Len	ane Width: Speed Limit: ulder Width: ulder Type: gth (miles): le Installed:	Low 2' Gravel 0.8				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depa ncy Medical Capa	s for all Occupar	
				& Systen	nic Ranking R									
North Dakota Curve ID	K	Α	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	
001A 001B 001C	0 0 0	0 0 0	555 215 150	240 240 240	No No No	Yes No Yes	**	x x	X - -	Chevron Chevron Chevron	- - -	- - -	x x x	Inspect Curve
Ranking C	orina n	ot cons	ocutivo as sor	mo curvos	may hayo boon ro	amoved from	o further an	valveie bocaus	o a largo radius	located on a gran	wel road, etc.			
Kanking C			ecutive, as sor		Severe Crashes Radius ADT section on Curve	Criteria > 0 500 to 1200 350 to 650 Yes		Curves are s	elected for projects s ty or Existing Ch	ct if:	vel road, etc			
Ţ	riteria	1		Inters	Severe Crashes Radius ADT section on Curve Visual Trap	Criteria > 0 500 to 1200 350 to 650		Curves are s - 3 or more ★ - x in Proximi	elected for projects s ty or Existing Ch	ct if:	vel road, etc			
Ţ	riteria	1	afety Impro	Inters	Severe Crashes Radius: ADT section on Curve Visual Trap Arrow Sign/Speed Advis Shoulder R	Criteria > 0 500 to 1200 350 to 650 Yes Yes Yes Description Chevrons Board Only sory Plaque	Type Proactive Proactive Proactive Proactive	Curves are s - 3 or more * - x in Proximi - within Critic Unit Cost \$3,300 \$500 \$800	per curve per curve per mile	ct if:	Total cost \$9,900 \$0 \$2,400 \$0 \$0	Notes - Segmer sheets.	nt projects sugg	ested on other
Describe F	Propo	sed S	afety Impro	Inters vements e Warning	Severe Crashes Radius: ADT Section on Curve Visual Trap Arrow Sign/Speed Advis Shoulder R Shou	Criteria > 0 500 to 1200 350 to 650 Yes Yes Description Chevrons Board Only sory Plaque umble Strip	Type Proactive Proactive Proactive Proactive	Curves are s - 3 or more ★ - x in Proximi - within Critic Unit Cost \$3,300 \$500 \$800 \$3,000	per curve per curve per mile	Quantity 3 0 3 0 miles 0 miles	Total cost \$9,900 \$0 \$2,400 \$0	sheets.	nt projects sugg	ested on other
Describe F	Propo	sed S	Advance	Inters vements e Warning	Severe Crashes Radius ADT Section on Curve Visual Trap Arrow Sign/Speed Advis Shoulder Shoulder Shoulder Ch (10% of Total p	Criteria > 0 500 to 1200 350 to 650 Yes Yes Description Chevrons Board Only sory Plaque umble Strip Ider Paving	Type Proactive Proactive Proactive \$11,070 \$1,230	Curves are s - 3 or more ★ - x in Proximi - within Critic Unit Cost \$3,300 \$500 \$800 \$3,000 \$37,000	per curve per curve per mile	Quantity 3 0 3 0 miles 0 miles	Total cost \$9,900 \$0 \$2,400 \$0 \$0 \$12,300	sheets.	nt projects sugg	ested on other
Describe F Project Co	riteria Propo.	ssed S	Advance e (attach de	Inters vements e Warning tailed co	Severe Crashes Radius ADT Section on Curve Visual Trap Arrow Sign/Speed Advis Shoulder Shoulder Shoulder Ch (10% of Total p	Criteria > 0 500 to 1200 350 to 650 Yes Yes Yes Description Chevrons Board Only sory Plaque umble Strip lder Paving deral Funds project Cost	Type Proactive Proactive Proactive Proactive \$11,070 \$1,230 \$12,300	Curves are s - 3 or more ★ - x in Proximi - within Critic Unit Cost \$3,300 \$500 \$800 \$3,000 \$37,000	per curve per curve per mile	Quantity 3 0 3 0 miles 0 miles	Total cost \$9,900 \$0 \$2,400 \$0 \$0 \$12,300 Sear of Construct	sheets.	nt projects sugg	ested on other
Describe F	riteria Propo.	ssed S	Advance 	Inters vements e Warning tailed co	Severe Crashes Radius ADT Section on Curve Visual Trap Arrow Sign/Speed Advis Shoulder Shoulder Shoulder Ch (10% of Total p	Criteria > 0 500 to 1200 350 to 650 Yes Yes Description Chevrons Board Only sory Plaque umble Strip Ider Paving	Type Proactive Proactive Proactive Proactive \$11,070 \$1,230 \$12,300	Curves are s - 3 or more ★ - x in Proximi - within Critic Unit Cost \$3,300 \$500 \$800 \$3,000 \$37,000	per curve per curve per mile	Quantity 3 0 3 0 miles 0 miles	Total cost \$9,900 \$0 \$2,400 \$0 \$0 \$12,300	sheets.	nt projects sugg	ested on other

North Dakota	a Depa	rtmen			PROGRAM gramming	i (HSIP)	PROJE	CI APPLI	CATION					
	a locati	on ma	Agen Conta Email ap(s). You may	cy Name act Name Address y use additi	: Pembina Co : Troy Kittelso : pembhwy@i onal sheets to fur	unty on nd.gov			ity limit to		ion with 135t ND DOT District: ephone Number:	6	3	
Location D	escrip	otion	(Corridor (Containin	g Curves)						SHSP Emphas	is Area (check all	that apply)	
End Facility Type	: Interse : 2-Lane : 458 e Rural	ection e Paved	st city limit with 135th Av	renue	S Shou Sho Len	Lane Width: Speed Limit: ulder Width: oulder Type: ugth (miles): le Installed:	High 2' Paved 7.6				Reduce Alcohol Impl Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emergen Improve Intersection	aired Driving Safety Restraints r Driver Safety ving dress Lane Depa cy Medical Capal	for all Occupar	
				& Systen	nic Ranking R		140010							
North Dakota Curve ID	Crasne:	s, 200 A	8 - 2012 Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed
009A 009B	0 0	0	765 540	458 458	No No	No No	** **	-	x x	Chevron Chevron	-	-	X X	45 40
*Curve numbe <i>Ranking C</i> i		t cons	ecutive, as so		Severe Crashes Radius ADT section on Curve	Criteria > 0 500 to 1200 350 to 650 Yes		Curves are se	elected for projects ty or Existing Ch	ct if:	ivel road, etc			
					Visual Trap	Yes								
Describe P	•		- Advano	ce Warning	Arrow Sign/Speed Advis Shoulder R Shou	Description Chevrons Board Only sory Plaque umble Strip Ider Paving	Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 2 0 2 .0 miles .0 miles	Total cost \$6,600 \$0 \$1,600 \$0 \$0 \$0 \$8,200	Notes -		
Project Co.	st Est	imate	e (attach de	etailed co	ру)					Proposed Y	ear of Constructi	on		
				Local Mate	ch (10% of Total p	deral Funds project cost) oject Cost	\$820	-						
NDDOT Ce		Office		I No.	Т	Defores	Mumbar				ID Number	I		
Project Accep Notes	<u>.ea?</u>		⊔ Yes ⊔	No		Reference	Number	I			ID Number	I		
													Page Segment IE Date	

HIGHWAY SAFET North Dakota Department	YIMPROV	/EIVIEN I	PROGRAMI	HSIPL								
SFN 59959 (06-2011)	nt of Transpo			(11011) 1	PROJE	CI APPLI	CATION					
Please attach a location m	Agen Conta Email	ncy Name: act Name: Address:	Pembina Cour Troy Kittelson pembhwy@no	nty า d.gov			ND 66 to I		on with ND 5 ND DOT District ephone Number	: 6		
Location Description) - a p s,							
Start: Intersection End: Intersection Facility Type: 2-Lane ADT: 130 Road Type Rural Pave County Road Pembina 12	with ND 5 / 9	3rd Street	Spe Should Should Lengt	ne Width: 1 eed Limit: I der Width: 2 der Type: I th (miles): 9 Installed: I	High 2' Paved 9.9				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depa ncy Medical Capa	for all Occupan	
Describe Current Sa		& System	ic Ranking Rev									
North Dakota Crashes, 200 Curve ID K A	Radius (ft)	ADT	on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
012A 0 0 012B 0 0	1100 1500	130 130	No No	No No	*	- X	X -	Chevron Chevron	- -	-	X -	-
*Curve numbering not cons Ranking Criteria Describe Proposed S		Inters	Cı Gevere Crashes Radius 50	riteria > 0	ı further an	Curves are se - 3 or more ★	elected for projects s y or Existing Ch	et if:	vel road, etc			
Describe Froposeu S	ватету ппірт	ovements										
	Advand	ce Warning S	(Arrow Bo Sign/Speed Advisol Shoulder Run		Proactive Proactive Proactive	\$500		Quantity 2 0 1 .0 miles .0 miles	Total cost \$6,600 \$0 \$800 \$0 \$0 \$7,400	Notes - Intersect sheets.	tion projects su	ggested on other
Project Cost Estimat	e (attach de	etailed cop	oy)					Proposed Y	ear of Construct	ion		
		Local Match	Feder n (10% of Total pro Total Proje		\$6,660 \$740 \$7,400	-						
NDDOT Central Office												
Project Accepted? Notes	☐ Yes ☐] No		Reference	Number				ID Number			
INUIGS												
											Page Segment ID Date	

Please attach a locat		Pembina 5	5 from Pembi	na/Cavali						147 - 11 - 11 - 1	
Location Descri	E	gency Name: ontact Name: mail Address:	Pembina County Troy Kittelson pembhwy@nd.go	ov		y Line to i		on With Delai ND DOT District ephone Number	: 6	·)
				escribe your proj	ect.						
Start: Pemb	pina/Cavalier Control on with Del ne		Lane W Speed Shoulder W	Type: Paved niles): 1.2				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depa ncy Medical Capa	for all Occupan	
			ic Ranking Reviev								
North Dakota Crashe Curve ID K	es, 2008 - 2012 A Radius	(ft) ADT	Intersection Vision Curve Tra	ap Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	
055A 0	0 1040	375	No N	lo **	-	Х	Chevron	-	-	Х	50
Ranking Criteria		Inters	Criteri Severe Crashes > Radius 500 to ADT 350 te ection on Curve Ye Visual Trap Ye	ia 0 0 1200 o 650 es	Curves are se	elected for projects s	et if:	vel road, etc			
Describe Propos	sed Safety II	mprovements									
	A	dvance Warning S	Arrow Board Sign/Speed Advisory Pl Shoulder Rumble	vrons Proactive I Only Proactive laque Proactive	\$500 \$800 \$3,000	per curve per curve per curve per mile per mile	Quantity 1 0 1 .0 miles .0 miles	Total cost \$3,300 \$0 \$800 \$0 \$0	Notes - Segmer sheets.	nt projects sugge	ested on other
Project Cost Est	timate (attac	h detailed cop	py)				Proposed You	ear of Construct	ion		
		Local Match	Federal F h (10% of Total project Total Project (cost) \$410	_						
NDDOT Central							L				
Project Accepted? Notes	Yes	□No	Refe	erence Number				ID Number			
										Page	: 4

Agency Nam Contact Nam Email Addres Please attach a location map(s). You may use add Location Description (Corridor Contain				cy Name: ct Name: Address:	Pembina Co Troy Kittelso pembhwy@	unty on nd.gov			28th Aven		rsection with ND DOT District: ephone Number:	6		nue
						ther describ	e your proje	ect.						
End Facility Type ADT Road Typ	Start: Intersection with ND 32 / 128th Ave End: Intersection with ND 18 / 144th Ave Facility Type: 2-Lane ADT: 315 Road Type Rural Paved County Road Pembina 55				Shou Shou Len	ane Width: peed Limit: lder Width: ulder Type: gth (miles): le Installed:	High 4' Paved 16.0				SHSP Emphas Reduce Alcohol Imp. Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emergen Improve Intersection	Safety Restraints or Driver Safety ving dress Lane Depa cy Medical Capa	for all Occupan	
				& Systemi	c Ranking R		110000							
Curve ID	K	Α	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
055B 055C 055D	0 0 0	0 0 0	790 1100 785	315 315 315	Yes No No	No No No	** * *	-	X X X	Chevron Chevron Chevron	-	-	X X X	45 - 45
*Curve numb Ranking C			secutive, as so	S	evere Crashes Radius	Criteria > 0 500 to 1200 350 to 650 Yes Yes		Curves are so	ty or Existing Che	ct if:	ivel road, etc			
Describe F	Propo	sed S	afety Impro	vements										
					Arrow ign/Speed Advis Shoulder R Shou	Board Only sory Plaque	Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 3 0 3 .0 miles .0 miles	Total cost \$9,900 \$0 \$2,400 \$0 \$0 \$12,300	Notes -		
Project Co	st Es	timat	e (attach de	tailed cop	y)					Proposed Y	ear of Construct	ion		
						deral Funds		_						
				Local Match		ject Cost	\$12,300							
NDDOT Ce		Offic				ject Cost					ID Number	T		
NDDOT Ce Project Accep Notes		Offic		Local Match							ID Number		Page	. 5

Diago attach			Agen Conta Email	cy Name: ct Name: Address:	Pembina Co Troy Kittelso pembhwy@i	unty on nd.gov			/ 144th Av		nterchange w ND DOT District ephone Number	: 6	_	5
			ap(s). You may (Corridor C		nal sheets to furt GCurves)	tner describ	e your proje	ect.						
	Interd 2-Lar 366 Rural	change ne I Pave			S Shou Sho Len	Lane Width: Speed Limit: Julder Width: Julder Type: Julder (miles): Julder Installed:	High 2' Paved 14.1				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Odd Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depa ncy Medical Capal	for all Occupar	
Describe C North Dakota (& Systemi	ic Ranking R		years							
Curve ID 055E	K 0	A 0	Radius (ft)	ADT 366	Intersection on Curve	Visual Trap Yes	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project Chevron	Shoulder Paving Project Inside/Outside	Shoulder Rumble Strip Project Inside/Outside	Advance Horizontal Alignment Warning Sign	40
055F 055G	1 0	0	575 825	366 366	Yes No	Yes No	****	X X	X X	Chevron Chevron	Inside/Outside Inside/Outside	Inside/Outside Inside/Outside	X X	40 45
'Curve numbe Ranking Cr			secutive, as so	S	Gevere Crashes Radius	Criteria > 0 500 to 1200 350 to 650 Yes		Curves are so	ty or Existing Che	et if:	vel road, etc			
			secutive, as sou	S	Severe Crashes Radius ADT	Criteria > 0 500 to 1200 350 to 650		Curves are so - 3 or more ★ - x in Proximi	elected for projects ty or Existing Ch	et if:	vel road, etc			
Ranking Cr	riteria	1	secutive, as so	S	Severe Crashes Radius ADT ection on Curve	Criteria > 0 500 to 1200 350 to 650 Yes		Curves are so - 3 or more ★ - x in Proximi	elected for projects ty or Existing Ch	et if:	vel road, etc			
Ranking Cr	riteria	1	Safety Impro	Interse overnents	Severe Crashes Radius: ADT ection on Curve Visual Trap Arrow 6ign/Speed Advis Shoulder R	Criteria > 0 500 to 1200 350 to 650 Yes Yes Yes Description Chevrons Board Only sory Plaque	Type Proactive Proactive Proactive Proactive	Curves are si - 3 or more ★ - x in Proximi - within Critics Unit Cost \$3,300 \$500 \$800	per curve per curve per mile	et if:	Total cost \$13,200 \$0 \$3,200 \$1,240 \$15,297 \$32,937	Notes - Segmen suggested on ot		on projects
Ranking Cr	ropos	sed S	Safety Impro	Interse overnents e Warning S	Severe Crashes Radius ADT ection on Curve Visual Trap Arrow Gign/Speed Advis Shoulder R	Criteria > 0 500 to 1200 350 to 650 Yes Yes Description Chevrons Board Only sory Plaque umble Strip	Type Proactive Proactive Proactive Proactive	Curves are signary control of the c	per curve per curve per mile	Quantity 4 0 4 .4 miles .4 miles	Total cost \$13,200 \$0 \$3,200 \$1,240 \$15,297	suggested on ot		on projects
Ranking Cr	ropos	sed S	Advance (attach de	Interse overnents e Warning S otalled cop	Severe Crashes Radius ADT ection on Curve Visual Trap Arrow bign/Speed Advis Shoulder R Shou	Criteria > 0 500 to 1200 350 to 650 Yes Yes Description Chevrons Board Only sory Plaque umble Strip lder Paving	Type Proactive Proactive Proactive \$29,644 \$3,294	Curves are signary control of the c	per curve per curve per mile	Quantity 4 0 4 .4 miles .4 miles	Total cost \$13,200 \$0 \$3,200 \$1,240 \$15,297 \$32,937	suggested on ot		on projects
Ranking Cr	ropos	ssed S	Advanc 	Interse overnents e Warning S etailed cop	Severe Crashes Radius ADT ection on Curve Visual Trap Arrow bign/Speed Advis Shoulder R Shou	Criteria > 0 500 to 1200 350 to 650 Yes Yes Description Chevrons Board Only sory Plaque umble Strip Ider Paving	Type Proactive Proactive Proactive Proactive \$29,644 \$3,294 \$32,937	Curves are signary control of the c	per curve per curve per mile	Quantity 4 0 4 .4 miles .4 miles	Total cost \$13,200 \$0 \$3,200 \$1,240 \$15,297 \$32,937	suggested on ot		on projects

North Dakota SFN 59959 (0						Interse	ction v	vith 101s	t Street to	Intersec	tion with 107	th Street		
			Conta	act Name:	Pembina Co Troy Kittelso pembhwy@i	on					ND DOT District: ephone Number:		8	
Please attach Location D					nal sheets to fur	ther describ	e your proje	ect.						
Start End Facility Type	: Inters	ection ection	with 101st Str with 107th St	reet	L S Shou	ane Width: speed Limit: ulder Width: ulder Type:	High 0'				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri	Safety Restraints er Driver Safety		uts
Road Type County Road		Paveo	I			gth (miles): le Installed:					Improvements to Ad Enhancing Emergen Improve Intersection	icy Medical Capa		se Survivability
				& System	ic Ranking R									
North Dakota Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
518A 518B	0 0	0 0	1800 1200	275 275	No Yes	No No	**	X X	- X	Chevron Chevron	-	-	-	-
518C 518D	0	0 0	575 1150	275 275	Yes No	No No	** *	X X	x x	Chevron Chevron	-	-	X	40
*Curve numbe Ranking Ci			ecutive, as so	Ş	Severe Crashes Radius	Criteria > 0 500 to 1200 350 to 650 Yes Yes		Curves are se	elected for projects s y or Existing Che	et if:	vel road, etc			
Describe P			ofoto I langua				•							
Describe F	ТОРОЗ	seu 3	-		Arrow Sign/Speed Advis Shoulder R	Board Only sory Plaque	Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 4 0 1 .0 miles .0 miles	Total cost \$13,200 \$0 \$800 \$0 \$0 \$0	Notes -		
Project Co:	st Est	imate	e (attach de	etailed cop	oy)					Proposed Y	ear of Construct	ion		
				Local Match	n (10% of Total p	deral Funds project cost) pject Cost	\$1,400	-						
NDDOT Ce		Office								ı				
Project Accep Notes	ted?		Yes	No		Reference	e Number	<u> </u>			ID Number	<u> </u>		
													Page Segment ID Date	

Pembina County Summary of Rural Intersection Projects

Page	Intersection ID	Description	Risk Ranking	Mainline Dynamic Warning Sign	Install Street Lights	Signs & Markings	Project Cost (\$)
1	2.01	141st Ave NE (Pembina 2) & Division Ave NE (ND 5)	****	Х	-	х	\$51,850
2	1.04	101st St NE (Pembina 1) & 141st Ave NE (Pembina 2)	***	-	Х	Х	\$9,700
3	6.02	ND 5 & 127th Ave NE (Pembina 6)	***	Х	Х	Х	\$59,700
4	3.07	89th St NE (Pembina 3) & Interstate 29 NB Ramps	***	-	-	Х	\$3,700
5	1.01	101st St NE (Pembina 1) & 127th Ave NE	***	-	Х	Х	\$9,250
6	1.05	101st St NE (Pembina 1) & 144th Ave NE (ND 18)	***	-	Х	Х	\$9,700
7	1.08	101st St NE (Pembina 1) & Interstate 29 NB Ramps	***	-	-	Х	\$3,700
8	502.01	86th St NE (Pembina 502) & Interstate 29 SB Ramps	***	-	-	Х	\$3,700
9	1.03	101st St NE (Pembina 1) & 137th Ave NE (Pembina 12)	***	-	Х	Х	\$9,000
10	11.01	84th St NE (Pembina 11) & US 81	***	-	-	Х	\$3,000
11	11.03	84th St NE (Pembina 11) & Interstate 29 NB Ramps	***	-	-	х	\$3,700
12	12.03	ND 5 (W) & 137th Ave NE (Pembina 12)	***	-	Х	Х	\$9,000
13	12.04	ND 5 (E) & 137th Ave NE (Pembina 12)	***	-	Х	Х	\$9,000
14	55.05	107th St NE (Pembina 55) & Interstate 29 SB Ramps	***	Х	Х	Х	\$65,700
15	500.01	ND 66 & 161st Ave NE (Pembina 500)	***	-	-	Х	\$7,400
16	502.02	86th St NE (Pembina 502) & Interstate 29 NB Ramps	***	-	-	Х	\$3,700
			•	3	8	17	\$261,800

Pembina County Rural Intersection Listing

Int#	Intersection Description	Skew	On/Near Curve	Development	RR Xing	ADT	Previous STOP (>5mi)	Total Crashes	ADT Cross Product > 100,000	Cra	ash Cost
1.01	101st St NE (Pembina 1) & 127th Ave NE	No	No	No	No	1117	Yes	1	Yes	\$	12,000
1.02	101st St NE (Pembina 1) & 135th Ave NE (Pembina 518)	No	No	No	No	645	Yes	0	No	\$	-
1.03	101st St NE (Pembina 1) & 137th Ave NE (Pembina 12)	No	No	Yes	No	680	Yes	0	Yes	\$	-
1.04	101st St NE (Pembina 1) & 141st Ave NE (Pembina 2)	No	No	No	No	670	Yes	1	Yes	\$	412,000
1.05	101st St NE (Pembina 1) & 144th Ave NE (ND 18)	No	No	No	No	740	Yes	1	Yes	\$	12,000
1.06	101st St NE (Pembina 1) & 152nd Ave NE (Pembina 4)	No	No	No	No	285	Yes	1	No	\$	12,000
1.07	101st St NE (Pembina 1) & Interstate 29 SB Ramps	No	Yes	No	No	140	Yes	0	No	\$	-
1.08	101st St NE (Pembina 1) & Interstate 29 NB Ramps	Yes	No	No	No	100	Yes	1	No	\$	12,000
2.01	141st Ave NE (Pembina 2) & Division Ave NE (ND 5)	Yes	Yes	Yes	No	2463	Yes	0	Yes	\$	-
2.02	141st Ave NE (Pembina 2) & 107th St NE (Pembina 55)	No	No	No	No	490	Yes	0	No	\$	-
3.01	88th St NE (Pembina 3) & ND 32	No	No	No	No	603	Yes	0	No	\$	-
3.02	88th St NE (Pembina 3) & 135th Ave NE (Pembina 12)	No	No	No	No	435	Yes	0	No	\$	-
3.03	88th St NE (Pembina 3) & 140th Ave NE (ND 18)	No	No	No	No	1200	Yes	0	Yes	\$	-
3.04	88th St NE (Pembina 3) & 148th Ave NE (US 81) SOUTH	No	No	No	No	385	Yes	0	No	\$	-
3.05	89th St NE (Pembina 3) & 148th Ave NE (US 81) NORTH	No	No	No	No	482	Yes	0	No	\$	-
3.06	89th St NE (Pembina 3) & Interstate 29 SB Ramps	Yes	No	No	No	110	Yes	0	No	\$	-
3.07	89th St NE (Pembina 3) & Interstate 29 NB Ramps	Yes	No	No	No	70	Yes	1	No	\$	91.000
4.01	ND 66 & 155th Ave NE (Pembina 4)	No	No	No	No	465	Yes	1	No	\$	12,000
4.02	ND 5 & 152nd Ave NE (Pembina 4)	No	No	No	No	957	Yes	1	No	\$	12,000
6.01	92nd St NE (Pembina 6) & 127th Ave NE	No	No	No	No	90	No	0	No	\$	12,000
6.02	ND 5 & 127th Ave NE (Pembina 6)	No	No	No	No	1275	Yes	1	Yes	\$	136,000
7.01	81st St NE (Pembina 7) & ND 32	No	No	No	No	862	Yes	1	No	\$	12,000
9.01	104th St NE (Pembina 9) & 135th Ave NE (Pembina 12)	No	No	No	No	417	Yes	0	No	\$	12,000
	84th St NE (Pembina 11) & US 81	Yes	Yes	No	No	635	Yes	0	No	\$	
	84th St NE (Pembina 11) & Interstate 29 SB Ramps	No	Yes	No	No	133	Yes	0	No	\$	-
	84th St NE (Pembina 11) & Interstate 29 NB Ramps	No	Yes	No	Yes	180	Yes	0	No	\$	_
	84th St NE (Pembina 11) & 161st Ave NE	No	No	No	Yes	245	No	0	No	\$	-
	ND 66 & 135th Ave NE (Pembina 12)	No	No	No	No	510	Yes	0	No	\$	
	91st St NE & 135th Ave NE (Pembina 12)	No	No	No	No	1495	Yes	0	Yes	\$	-
	ND 5 (W) & 137th Ave NE (Pembina 12)	No	Yes	No	No	1445	Yes	0	Yes	\$	
	ND 5 (W) & 137th Ave NE (Fembina 12)	No	No	Yes	No	1787	Yes	0	Yes	\$	
	107th St NE (Pembina 55) & ND 32	No	No	No	No	717	Yes	1	No	\$	12,00
	107th St NE (Pembina 55) & 135th Ave NE (Pembina 55)	No	No	No	No	415	Yes	0	No	\$	12,00
	107th St NE (Pembina 55) & ND 18	No	No	No	No	955	Yes	0	Yes	\$	
	107th St NE (Pembina 55) & Interstate 29 SB Ramps	No	Yes	No	No	1938	Yes	0	Yes	\$	
	ND 66 & 161st Ave NE (Pembina 500)	No	No	Yes	Yes	3215	No	0	Yes	\$	
	86th St NE (Pembina 502) & Interstate 29 SB Ramps	No	Yes	No	No	85	Yes	1	No	\$	12,000
	86th St NE (Pembina 502) & Interstate 29 NB Ramps	Yes	Yes	No	No	103	Yes	0	No	\$	12,000
	91st St NE (Pembina 503) & 133rd Ave NE	No	No	No	No	45	No	0	No	\$	
	92nd St NE (Pembina 504) & 133rd Ave NE	No	No	No No	No	45 19	No No	0	No	\$	
		No	No	No	No	555	Yes	0	No	\$	
	92nd St NE (Pembina 505) & ND 32							0		\$	
	93rd St NE & 160th Ave NE	Yes	No	No	No	22	No		No		-
	93rd ST NE & Interstate 29 SB Ramps	No	Yes	No	No	40	Yes	0	No	\$	-
	93rd ST NE & Interstate 29 NB Ramps	No	Yes	No	No	55	Yes	0	No	\$	-
	ND 5 & 135th 1/2 Ave NE	No	Yes	No	No	1137	No	0	No	\$	-
ภา 1.01	ND 5 160th 1/2 Ave NE	No	No	No	Yes	498	Yes	0	No	\$	-

Pembina County Rural Intersection Prioritization

Rank	Int#	Intersection Description	Skew		Development	RR Xing		Total Crashes	100,000	Priority		sh Cost
1	2.01	141st Ave NE (Pembina 2) & Division Ave NE (ND 5)	*	*	*		*		*	****	\$	-
2	1.04	101st St NE (Pembina 1) & 141st Ave NE (Pembina 2)					*	*	*	***		412,000
3	6.02	ND 5 & 127th Ave NE (Pembina 6)					*	*	*	***	-	136,000
4	3.07	89th St NE (Pembina 3) & Interstate 29 NB Ramps	*				*	*		***	\$	91,000
5	1.01	101st St NE (Pembina 1) & 127th Ave NE					*	*	*	***	\$	12,000
6	1.05	101st St NE (Pembina 1) & 144th Ave NE (ND 18)					*	*	*	***	\$	12,000
7	1.08	101st St NE (Pembina 1) & Interstate 29 NB Ramps	*				*	*		***	\$	12,000
8	502.01	86th St NE (Pembina 502) & Interstate 29 SB Ramps		*			*	*		***	\$	12,000
9	1.03	101st St NE (Pembina 1) & 137th Ave NE (Pembina 12)			*		*		*	***	\$	-
10	11.01	84th St NE (Pembina 11) & US 81	*	*			*			***	\$	-
11	11.03	84th St NE (Pembina 11) & Interstate 29 NB Ramps		*		*	*			***	\$	-
12	12.03	ND 5 (W) & 137th Ave NE (Pembina 12)		*			*		*	***	\$	-
13	12.04	ND 5 (E) & 137th Ave NE (Pembina 12)			*		*		*	***	\$	-
14	55.05	107th St NE (Pembina 55) & Interstate 29 SB Ramps		*			*		*	***	\$	-
15	500.01	ND 66 & 161st Ave NE (Pembina 500)			*	*			*	***	\$	-
16	502.02	86th St NE (Pembina 502) & Interstate 29 NB Ramps	*	*			*			***	\$	-
17	1.06	101st St NE (Pembina 1) & 152nd Ave NE (Pembina 4)					*	*		**	\$	12,000
18	4.01	ND 66 & 155th Ave NE (Pembina 4)					*	*		**	\$	12,000
19	4.02	ND 5 & 152nd Ave NE (Pembina 4)					*	*		**	\$	12,000
20	7.01	81st St NE (Pembina 7) & ND 32					*	*		**	\$	12,000
21	55.02	107th St NE (Pembina 55) & ND 32					*	*		**	\$	12,000
22	1.07	101st St NE (Pembina 1) & Interstate 29 SB Ramps		*			*			**	\$	-
23	3.03	88th St NE (Pembina 3) & 140th Ave NE (ND 18)					*		*	**	\$	-
24	3.06	89th St NE (Pembina 3) & Interstate 29 SB Ramps	*				*			**	\$	-
25	11.02	84th St NE (Pembina 11) & Interstate 29 SB Ramps		*			*			**	\$	-
26	12.02	91st St NE & 135th Ave NE (Pembina 12)					*		*	**	\$	-
27	55.04	107th St NE (Pembina 55) & ND 18					*		*	**	\$	-
28	507.01	93rd ST NE & Interstate 29 SB Ramps		*			*			**	\$	-
29	507.02	93rd ST NE & Interstate 29 NB Ramps		*			*			**	\$	-
30	511.01	ND 5 160th 1/2 Ave NE				*	*			**	\$	-
30	516.01	7th St & ND 18	*						*	**	\$	-
32	1.02	101st St NE (Pembina 1) & 135th Ave NE (Pembina 518)					*			*	\$	-
33	2.02	141st Ave NE (Pembina 2) & 107th St NE (Pembina 55)					*			*	\$	-
34	3.01	88th St NE (Pembina 3) & ND 32					*			*	\$	-
35	3.02	88th St NE (Pembina 3) & 135th Ave NE (Pembina 12)					*			*	\$	-
36	3.04	88th St NE (Pembina 3) & 148th Ave NE (US 81) SOUTH					*			*	\$	-
37	3.05	89th St NE (Pembina 3) & 148th Ave NE (US 81) NORTH					*			*	\$	-
38	9.01	104th St NE (Pembina 9) & 135th Ave NE (Pembina 12)					*			*	\$	-
39	11.04	84th St NE (Pembina 11) & 161st Ave NE				*				*	\$	-
40	12.01	ND 66 & 135th Ave NE (Pembina 12)					*			*	\$	-
41	55.03	107th St NE (Pembina 55) & 135th Ave NE (Pembina 55)					*			*	\$	-
42	505.01	92nd St NE (Pembina 505) & ND 32					*			*	\$	-
43	506.01	93rd St NE & 160th Ave NE	*							*	\$	-
44	509.01	ND 5 & 135th 1/2 Ave NE		*						*	\$	-
45	6.01	92nd St NE (Pembina 6) & 127th Ave NE									\$	-
46	503.01	91st St NE (Pembina 503) & 133rd Ave NE									\$	-
47	504.01	92nd St NE (Pembina 504) & 133rd Ave NE									\$	-
	Totals	Total Stars % That Gets Sta		12 26%	4 9%	4 9%	39 83%	12 26%	14 30%			

Totals % That Gets Star 17% 26% 9% 9% 83% 26% 30%	
70 That Good Gtal 1170 2070 070 0070 2070	
# %	
****** 0 0% Stars	
****** 0 0% Skew - If intersection is skewed at an angle of 20 degrees or greater.	
***** 1 2% On/Near Curve - If intersection is on or within 1,000 feet of curve.	
**** 0 0% Development - If intersection aerial shows a commercial development with access near intersection	ion.
*** 15 32% RR Xing - If intersection has a railroad crossing on any approach within 500 feet.	
★★ 15 32% Previous STOP (>5 mi) - If vehicles approaching the stop control have not had a previous stop along the roa	adway within 5 miles
★ 13 28% Total Crashes - If intersection has at least 1 crash.	
- 3 6% ADT Cross Product - If intersection has an ADT cross product >100,000.	
47 100%	

HIGHWAY SAFETY IN			M (HSIP) PROJ	ECT APPLIC	CATION		
North Dakota Department of ⁻ SFN 59959 (06-2011)			(5.11.0)				
Agency Name: Contact Name: Email Address:	Pembina Troy Kitte	elson	(Pembina 2) 8	ND I	Ave NE (DOT District one Number	: 6	5-4208
Please attach a location map(s).			urther describe your pro	oject			
Location Description							
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Pembina	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	Yes No #N/A		Reduce Alcoh Increase the L Younger Drive Curb Aggress Improvements	ol Impaire Jse of Safe r/Older Dr ive Driving to Addres nergency N	ety Restraints for all Occupants river Safety I ss Lane Departure Crashes Medical Capabilities to Increase Survivabili
Describe Current Safety	Issues & S	Systemic Ranking	Review				
North Dakota TBD, 2008 - 2012		5	years				
	Total	Angle	K+A	1			
Crashes	0	0	0.00				The state of the s
Rate (per MVM)	0.0	0.0	0.0				
	Value	Critical	Risk Ranking				
Skew On/Near Curve		Yes Yes	*		A La	- 18	Marka de la companya della companya
Development		Yes	*				
Near RR Crossing		Yes					一旦 基本
Distance from previous STOP		Yes	*				一种产生
Volume Cross Product Total Crashes		≥ 100,000 >0	*				
			****			this .	
Describe Proposed Safet	y Improve	ements					
	Description	Unit Cost		Units	Cost	Notes -	Segment projects suggested on other
	Roundabout	\$1,000,000	per intersection	0	\$0.00	sheets.	g pjgg
	onal Median		per intersection	0	\$0.00		
Mainline Dynamic W	ose Median		per intersection per intersection	1 0	\$50,000.00 \$0.00		
Installing S	Street Lights	\$6,000	per street light	Installed	\$0.00		
	e Stop Sign		per sign	1	\$350.00		
Upgrade Ju Upgrade Stop			per sign per sign	1	\$350.00 \$450.00		
Upgrade Stop Ahe			per marking	1	\$450.00		
	de Stop Bar	•	per marking	1	\$250.00		
Review Sigr	is and CST	\$2,450	per intersection	0	\$0.00 \$51,850.00	_	
Signs and Markings and Street L	_ight project	costs vary by the numb	er of minor legs associa	ated with the inter			
Project Cost Estimate (at	tach deta	iled copy)		Proposed	Year of Con	structio	n
Eor	deral Funds	\$46,665					
Local Match (10% of Total p		\$5,185					
	ject Cost	\$51,850	-				
NDDOT Central Office Or	alv						
Project Accepted?		□No	Reference Number			ID Numb	per
Notes			recipioned realised			ID ITAIII	301
							Page: 1
							Intersection ID: 2.01 Date: 10/23/2013

HIGHWAY SAFETY IN	//PROVE	MENT PROGRA	M (HSIP) PROJI	ECT APPLI	CATION		
North Dakota Department of SFN 59959 (06-2011)	Transporta	tion Programming					
		101st St NE (P	embina 1) & 1		•	•	
Agency Name:					DOT District		
Contact Name:				Teleph	one Number	: 701-265-42	08
Email Address: Please attach a location map(s).			urthor dogoribo vour pro	ningt			
Location Description	rou may u	se additional sneets to i	urther describe your pro	ујест			
Location Description					SHSP Er	nphasis Area (cl	heck all that apply)
						ol Impaired Driv	
Configuration:		Traffic Control Device:	•				estraints for all Occupants
Configuration (2): Urban/Rural:		Street Lights: Flashers:			Ü	er/Older Driver S	Safety
	Pembina	Major Entering ADT:			Curb Aggress		ne Departure Crashes
Entering ADT:		Minor Entering ADT:					al Capabilities to Increase Survivabi
_		_		✓	Improve Inters		·
Describe Courset Cafety	laawaa 0	Cuatamia Dankina	Daview				
Describe Current Safety I North Dakota TBD, 2008 - 2012			years				
1101111 Ballotta 123, 2000 2012		Č	youro				
	Total	Angle	K+A			SE STATE	
Crashes		1 0.8	1.00 0.8				
Rate (per MVM)	0.6	0.0	0.0	—	A AMERICAN		
	Value	Critical	Risk Ranking				Market and April 2
Skew On/Near Curve		Yes					Silver Service Community
Development		Yes Yes					
Near RR Crossing		Yes					
Distance from previous STOP	Yes	Yes	*				
Volume Cross Product		≥ 100,000	*				E A CONTRACTOR
Total Crashes	1	>0	* **				
Describe Proposed Safet	y Improv	ements					
	Description	Unit Cost		Units	Cost	Notes -	
	Roundabout		per intersection	0	\$0.00	<u> </u>	
Direction Mainline Dynamic W	onal Median		per intersection per intersection	0	\$0.00 \$0.00		
	ose Median		per intersection	0	\$0.00		
Installing S	Street Lights	\$6,000	per street light	1	\$6,000.00		
	e Stop Sign		per sign	2	\$700.00		
Upgrade Ju Upgrade Stop	Inction Sign		per sign	2 2	\$700.00 \$900.00		
Upgrade Stop Ahe			per sign per marking	2	\$900.00		
	de Stop Bar		per marking	2	\$500.00		
Review Sign	ns and CST	\$2,450	per intersection	0	\$0.00	_	
Signs and Markings and Street L	ight project	coete vary by the numb	or of minor loge associa	atad with the inte	\$9,700.00		
Project Cost Estimate (at			er or minor legs associa		Year of Con	struction	
Fed	deral Funds						
Local Match (10% of Total p		\$970	-				
Total Pro	oject Cost	\$9,700					
NDDOT Central Office Or	ıly						
Project Accepted?	Yes	□No	Reference Number			ID Number	
Notes							
							Page: 2
						Inte	ersection ID: 1.04 Date: 10/23/2013

HIGHWAY SAFETY IM North Dakota Department of T			M (HSIP) PROJI	ECT APPLI	CATION			
SFN 59959 (06-2011)	ranoportati							
			& 127th Ave	-	-			
Agency Name: I					DOT District:	-		
Contact Name:	-			Teleph	one Number	701-265-42	208	
Email Address: Please attach a location map(s).			urther describe your pro	niect				
Location Description	Tou may do	o additional officers to 1	artifor accorded your pro	,joot				
							heck all that apply)	
Configuration:	v	Traffic Control Device:	Thru/Stop			ol Impaired Driv	•	
Configuration: 2 Configuration (2): U		Street Lights:				se of Safety Re r/Older Driver S	estraints for all Occupants Safety	
Urban/Rural: F	Rural	Flashers:			Curb Aggressi	ve Driving	•	
County: F		Major Entering ADT:			•		ne Departure Crashes	vahilit.
Entering ADT: 1	12/5	Minor Entering ADT:	405		Improve Inters	• ,	al Capabilities to Increase Survi	vability
					<u> </u>			
Describe Current Safety Is North Dakota TBD, 2008 - 2012	ssues & S		Review years					
NOTH Dakota 16D, 2006 - 2012		5	years					
	Total	Angle	K+A				THE PARTY OF THE P	
Crashes Rate (per MVM)	1 0.4	0 0.0	0.00 0.0					
rato (por mini)		0.0	0.0		- pt pt.			
						The State of the	排列政治和	
	Value	Critical	Risk Ranking					
Skew	No	Yes	KISK KATIKITIY					
On/Near Curve	No	Yes			TO CANADA	500	400	
Development	No	Yes						
Near RR Crossing Distance from previous STOP	No Yes	Yes Yes	+					
Volume Cross Product	Yes	≥ 100,000	*			Sec. 1		
Total Crashes	1	>0	*		10		TOTAL STATE OF	

Describe Proposed Safety	/ Improve	ments						
Г	Description	Unit Cost		Units	Cost	Notes -		
	oundabout		per intersection	0	\$0.00	_110163 -		
	nal Median		per intersection	0	\$0.00			
Mainline Dynamic Wa	arning Sign se Median		per intersection per intersection	1 0	\$50,000.00 \$0.00			
Installing St			per street light	1	\$6,000.00			
. 0	Stop Sign		per sign	2	\$700.00			
Upgrade Jur Upgrade Stop A			per sign per sign	2 2	\$700.00 \$900.00			
Upgrade Stop Ahea			per marking	2	\$900.00			
1 0	e Stop Bar		per marking	2	\$500.00			
Review Signs	and CST	\$2,450	per intersection	0	\$0.00 \$59,700.00	_		
Signs and Markings and Street Li			er of minor legs associa		rsection.			
Project Cost Estimate (att	ach detai	led copy)		Proposed	Year of Cons	struction		
Fede	eral Funds	\$53,730						
Local Match (10% of Total p <u>r</u>		\$5,970	_					
Total Proj	ect Cost	\$59,700						
NDDOT Central Office Onl	lv							
	•	□No	Reference Number			ID Number		
Notes								
							Dagge 2	
						Inte	Page: 3 ersection ID: 6.02	
						1110	Date: 10/23/2013	

HIGHWAY SAFETY IN	IPROVE	MENT PROGRA	M (HSIP) PROJE	CT APPLIC	CATION		
North Dakota Department of ⁻ SFN 59959 (06-2011)		tion Programming					
		89th St NE (F	Pembina 3) & Ir	nterstate	29 NB Ra	amps	
Agency Name:					DOT Distric	••• •	
Contact Name:	-			Teleph	one Numbe	er: 701-265-4208	
Email Address: Please attach a location map(s).			urther describe your prois	act			
Location Description	Tou may us	se additional sheets to h	artifier describe your proje	501			
200adon 2000npaon				T	SHSP E	Emphasis Area (check all that apply)	
0 - 5	V	Too (fig. October Door in	Th (O)			hol Impaired Driving	
Configuration: Configuration (2):		Traffic Control Device: Street Lights:	•			Use of Safety Restraints for all Occup ver/Older Driver Safety	pants
Urban/Rural:		Flashers:			Curb Aggress		
	Pembina	Major Entering ADT:				ts to Address Lane Departure Crashe	
Entering ADT:	70	Minor Entering ADT:	35			mergency Medical Capabilities to Include rsection Safety	rease Survivability
					improve inter	rsection datety	
Describe Current Safety I							
North Dakota TBD, 2008 - 2012		5	years				
	Total	Angle	K+A		% ///		
Crashes		0 0.0	0.00 0.0				
Rate (per MVM)	1.0	0.0	0.0	<u> </u>		\$ 1/1/19/10 m	
					45 11 11		
Skew	Value Yes	Critical Yes	Risk Ranking ★	<u> </u>			
On/Near Curve		Yes	^		SECT LINE		
Development		Yes					
Near RR Crossing		Yes					427
Distance from previous STOP Volume Cross Product		Yes ≥ 100,000	*				200
Total Crashes		>0	*				1
			***		Marie Maria		
Describe Proposed Safet	y Improve	ements					
	Description	Unit Cost		Units	Cost	Notes -	
	Roundabout		per intersection	0	\$0.00	Notes -	
	onal Median	. ,	per intersection	0	\$0.00		
Mainline Dynamic W	arning Signose Median		per intersection per intersection	0 0	\$0.00 \$0.00		
	Street Lights		per street light	0	\$0.00		
Upgrade	e Stop Šign	\$350	per sign	2	\$700.00		
Upgrade Ju Upgrade Stop			per sign	2 2	\$700.00		
Upgrade Stop Ahe			per sign per marking	2	\$900.00 \$900.00		
	de Stop Bar	·	per marking	2	\$500.00		
Review Sigr	ns and CST	\$2,450	per intersection	0	\$0.00 \$3.700.00		
Signs and Markings and Street L	_ight project	costs vary by the numb	er of minor legs associate	ed with the inter	+-,		
Project Cost Estimate (at	tach deta	iled copy)		Proposed	Year of Cor	nstruction	
For	deral Funds	\$3,330					
Local Match (10% of Total p		\$370					
Total Pro	ject Cost	\$3,700	•				
NDDOT Central Office On	alv						
Project Accepted?		□No	Reference Number	T		ID Number	
Notes	l.		<u> </u>			,	
						Page: 4	
						Intersection ID: 3.07 Date: 10/23/2	2013

HIGHWAY SAFETY IN	IPROVE	MENT PROGRA	M (HSIP) PROJE	FCT APPLIC	CATION		
North Dakota Department of TSFN 59959 (06-2011)		tion Programming	, ,				
		101st St	NE (Pembina	1) & 127tl	h Ave NE		
Agency Name:				ND	DOT District	:: 6	
Contact Name:				Teleph	one Number	: 701-265-42	08
Email Address:							
Please attach a location map(s).	You may us	e additional sheets to for	urther describe your pro	oject			
Location Description					CHCD E	mphasia Araa (al	neck all that apply)
						nol Impaired Driv	11 77
Configuration:		Traffic Control Device:	Thru/Stop			•	estraints for all Occupants
Configuration (2):		Street Lights:			0	er/Older Driver S	afety
Urban/Rural:	Rural Pembina	Flashers: Major Entering ADT:			Curb Aggress		e Departure Crashes
Entering ADT:		Minor Entering ADT:					al Capabilities to Increase Survivabili
		g		□ ☑		section Safety	a. Capasinise is included Califfragini
Describe Current Sefety	lacues P (Svotomio Bonking	Paviau				
Describe Current Safety I North Dakota TBD, 2008 - 2012			years				
,							
Crashes	Total 1	Angle 0	0.00				
Rate (per MVM)		0.0	0.00				
,					THE RESERVE		1
							All the state of t
	\/al	Orisinal	Diel Deelie				
Skew	Value No	Critical Yes	Risk Ranking				
On/Near Curve		Yes			TO SERVICE MANAGEMENT		
Development		Yes			1199		
Near RR Crossing		Yes			Maria Control		The state of the s
Distance from previous STOP		Yes	*				N. SPECIAL PROPERTY.
Volume Cross Product Total Crashes		≥ 100,000 >0	* *			AND DESCRIPTION OF REAL PROPERTY.	
10101 01001100			***	<u> </u>			
Describe Proposed Safet	v Improve	ements					
Describe Froposed Garet	y improve	monto					
	Description	Unit Cost		Units	Cost	Notes -	
	Roundabout onal Median		per intersection per intersection	0 0	\$0.00 \$0.00		
Mainline Dynamic W			per intersection	0	\$0.00		
	ose Median	\$25,000	per intersection	0	\$0.00		
	Street Lights		per street light	1 2	\$6,000.00		
Upgrade Ju	e Stop Sign		per sign per sign	2	\$700.00 \$700.00		
Upgrade Stop			per sign	2	\$900.00		
Upgrade Stop Ahe	•	·	per marking	1	\$450.00		
Upgrad Review Sign	de Stop Bar	·	per marking	2 0	\$500.00		
Review Sigi	is and CST	\$2,450	per intersection	0	\$0.00 \$9,250.00	_	
Signs and Markings and Street L			er of minor legs associa		section.		
Project Cost Estimate (at	tach detai	iled copy)		Proposed	Year of Con	struction	
Fed	deral Funds	\$8,325					
Local Match (10% of Total p		\$925	_				
Total Pro	oject Cost	\$9,250					
NDDOT Central Office On	alv.						
Project Accepted?		□No	Reference Number			ID Number	1
Notes				l		1	1
							Page: 5
						Inte	ersection ID: 1.01
							Date: 10/23/2013

HIGHWAY SAFETY IM			M (HSIP) PROJ	ECT APPLI	CATION	
North Dakota Department of T SFN 59959 (06-2011)	ransportat		(Pembina 1) &	2 144th Δν	ω NF (ND	118)
Agency Name: Contact Name: Email Address:	Troy Kitte pembhwy	County elson /@nd.gov	,	ND Teleph	DOT District	•
Please attach a location map(s). Location Description	You may us	e additional sneets to the	urtner describe your pro	рјест		
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Pembina 740	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 518 223		Reduce Alcoh Increase the U Younger Drive Curb Aggress Improvements	s to Address Lane Departure Crashes nergency Medical Capabilities to Increase Survivability
Describe Current Safety Is	ssues & S					
North Dakota TBD, 2008 - 2012		5	years			
Crashes Rate (per MVM)	Total 1 0.7	Angle 0 0.0	K+A 0.00 0.0	<u>-</u>	No.	
Skew On/Near Curve	Value No No	Critical Yes Yes	Risk Ranking			
Development Near RR Crossing Distance from previous STOP	No No Yes	Yes Yes Yes	+			
Volume Cross Product Total Crashes	Yes 1	≥ 100,000 >0	* * **			
D " D 10.6.6						
Describe Proposed Safety	y Improve	ements				
]	Description	Unit Cost		Units	Cost	Notes - Segment projects suggested on other
	oundabout nal Median		per intersection per intersection	0	\$0.00 \$0.00	sheets.
Mainline Dynamic Wa		. ,	per intersection	0	\$0.00	
	se Median	\$25,000	per intersection	0	\$0.00	
Installing St	treet Lights Stop Sign		per street light per sign	1 2	\$6,000.00 \$700.00	
Upgrade Jui			per sign	2	\$700.00	
Upgrade Stop A			per sign	2	\$900.00	
Upgrade Stop Ahea	ad Marking le Stop Bar		per marking per marking	2 2	\$900.00 \$500.00	
Review Sign	•		per intersection	0	\$0.00	
Ciana and Madinas and Chart I	:			-4	\$9,700.00	_
Signs and Markings and Street Li Project Cost Estimate (att			er or minor legs associa		Year of Con	struction
, ,					1 0011 01 0011	
Fed Local Match (10% of Total p Total Pro		\$8,730 \$970 \$9,700				
NDDOT Central Office On	lv					
Project Accepted?	•	□No	Reference Number			ID Number
Notes						
						Page: 6 Intersection ID: 1.05 Date: 10/23/2013

HIGHWAY SAFETY IN	IPROVE	MENT PROGRA	M (HSIP) PROJE	FCT APPLIC	ΔΤΙΟΝ		
North Dakota Department of SFN 59959 (06-2011)		tion Programming	, ,				
		101st St NE (Pembina 1) &	Interstate 2	29 NB R	amps	
Agency Name:					OT Distric		
Contact Name:	-			Telepho	ne Numbe	r: 701-265-4208	
Email Address: Please attach a location map(s).			urther describe vour pro	niect			
Location Description	Tou may us	20 duditional officoto to 1	artifor december your pro	,joot			
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Pembina	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 60		Reduce Alcoh Increase the I Younger Drive Curb Aggress Improvements Enhancing Er	er/Older Driver Safe sive Driving s to Address Lane [aints for all Occupants
Describe Current Safety							
North Dakota TBD, 2008 - 2012		5	years				
	Total	Angle	K+A				
Crashes		0	0.00			1 2 2 1	The same of the sa
Rate (per MVM)	5.5	0.0	0.0	_			THE REAL PROPERTY.
				0	ALCO I	All or	
	Value	Critical	Diak Danking		1988 I		The second
Skew	Value Yes	Critical Yes	Risk Ranking ★			or may be	
On/Near Curve		Yes			1	MARIA	
Development Near RR Crossing		Yes Yes			TEST 1		
Distance from previous STOP		Yes	*				
Volume Cross Product		≥ 100,000					THE REAL PROPERTY.
Total Crashes	11	>0	* *	_	Elli.	V// 1988	
Describe Proposed Safet	y Improve	ments					
	Description	Unit Cost		Units	Cost	Notes - Segment	projects suggested on other
	Roundabout		per intersection	0	\$0.00	sheets.	
Mainline Dynamic W	onal Median arning Sign	. ,	per intersection per intersection	0 0	\$0.00 \$0.00		
Cle	ose Median	\$25,000	per intersection	0	\$0.00		
	Street Lights e Stop Sign		per street light per sign	0 2	\$0.00 \$700.00		
Upgrade Ju	inction Sign		per sign	2	\$700.00		
Upgrade Stop A Upgrade Stop Ahe			per sign per marking	2 2	\$900.00 \$900.00		
. •	de Stop Bar	·	per marking	2	\$500.00		
Review Sigr	ns and CST	\$2,450	per intersection	0	\$0.00 \$3.700.00	<u> </u>	
Signs and Markings and Street L	_ight project	costs vary by the numb	er of minor legs associa	ated with the inters	,		
Project Cost Estimate (at			J	Proposed \		nstruction	
For	deral Funds	\$3,330					
Local Match (10% of Total p		\$370					
Total Pro	oject Cost	\$3,700	_				
NDDOT Central Office Or	nlv						
Project Accepted?		□No	Reference Number	T		ID Number	
Notes				•		<u> </u>	
							Page: 7
						Interse	ection ID: 1.08
							Date: 10/23/2013

HIGHWAY SAFETY IN	/PROVE	MENT PROGRA	M (HSIP) PROJE	CT APPLIC	CATION		
North Dakota Department of SFN 59959 (06-2011)	Transporta	ation Programming	. ,				
		86th St NE (Pe	embina 502) &	Interstate	29 SB R	lamps	
Agency Name:					DOT Distric		
Contact Name:	-			Telepho	one Numbe	r: 701-265-42	08
Email Address: Please attach a location map(s).			urther describe your proi	iect			
Location Description	Tou may u	se additional sheets to h	urtrier describe your proj				
					SHSP E	mphasis Area (ch	neck all that apply)
0	V	Teeffic Occion Decise	TI /O			hol Impaired Driv	S
Configuration: Configuration (2):		Traffic Control Device: Street Lights:	•			Use of Safety Re er/Older Driver S	straints for all Occupants
Urban/Rural:		Flashers:			Curb Aggress		aroty
-	Pembina	Major Entering ADT:			Improvement	s to Address Lan	e Departure Crashes
Entering ADT:	85	Minor Entering ADT:	25				al Capabilities to Increase Survivability
				Į.	improve inter	section Safety	
Describe Current Safety		Systemic Ranking	Review				
North Dakota TBD, 2008 - 2012		5	years				
	Total	Angle	K+A		I ABOUT A	A 100	
Crashes		0	0.00	_			3/4/-
Rate (per MVM)	6.4	0.0	0.0	_			
					A POLICE	100	
					0.	1 260	
	Value	Critical	Risk Ranking	_			
Skew		Yes			11030		
On/Near Curve		Yes	*		-		Charles II FE
Development Near RR Crossing		Yes Yes					
Distance from previous STOP		Yes	*			Color of the Color	
Volume Cross Product	: No	≥ 100,000					
Total Crashes	1	>0	*	_			

Describe Proposed Safet	y Improv	ements					
	Description			Units	Cost	Notes - Segm	ent projects suggested on other
	Roundabout		per intersection	0	\$0.00	sheets.	
Direction Mainline Dynamic W	onal Median	. ,	per intersection per intersection	0 0	\$0.00 \$0.00		
	ose Median		per intersection	0	\$0.00		
Installing S	Street Lights	\$6,000	per street light	0	\$0.00		
	e Stop Šign		per sign	2	\$700.00		
Upgrade Stop	unction Sign Ahead Sign		per sign per sign	2 2	\$700.00 \$900.00		
Upgrade Stop Ahe			per marking	2	\$900.00		
. •	de Stop Bar		per marking	2	\$500.00		
Review Sign	is and CST	\$2,450	per intersection	0	\$0.00 \$3.700.00	_	
Signs and Markings and Street L			er of minor legs associat				
Project Cost Estimate (at	tach deta	iled copy)		Proposed	Year of Cor	struction	
Fed	deral Funds	\$3,330					
Local Match (10% of Total p			_				
Total Pro	oject Cost	\$3,700					
NDDOT Central Office Or	nly						
Project Accepted?	Yes	□No	Reference Number			ID Number	
Notes							
							Page: 8
						inte	ersection ID: 502.01 Date: 10/23/2013

HIGHWAY SAFETY IN	/PROVE	MENT PROGRA	M (HSIP) PROJE	ECT APPLI	CATION			
North Dakota Department of SFN 59959 (06-2011)	Transporta	ation Programming	, ,					
	1	101st St NE (Pe	embina 1) & 13	37th Ave	NE (Pemb	ina 12)		
Agency Name:					DOT District			
Contact Name:				Telepl	none Number	: 701-265-42	208	
Email Address:			and a surface of the	•				
Please attach a location map(s).	You may us	se additional sheets to f	urther describe your pro	ject				
Location Description					QUQD Er	mphasis Aroa (c	heck all that apply)	
						nol Impaired Driv	11 77	
Configuration:		Traffic Control Device:	Thru/Stop			•	estraints for all Occupants	
Configuration (2):		Street Lights:				er/Older Driver S	Safety	
Urban/Rural:		Flashers: Major Entering ADT:			Curb Aggress		ne Departure Crashes	
Entering ADT:	Pembina 680	Minor Entering ADT:					al Capabilities to Increase	Survivability
Littoring / LD 1 :	000	Willion Entoning 7.5 1.	200			section Safety	ar Capabilities to morease	Ourvivability
Describe Comment Cafety	laawaa 9	Cuatamia Dankina	Paviaw.					
Describe Current Safety I North Dakota TBD, 2008 - 2012			years					
		_	,					
Cracker	Total	Angle	K+A					
Crashes Rate (per MVM)		0 0.0	0.00 0.0					
rtate (per in vin)	0.0	0.0	0.0					
					Hall Co			
					2000		Carl C	
Skew	Value No	Critical Yes	Risk Ranking					
On/Near Curve		Yes						
Development		Yes	*		A CONTROL OF THE PARTY OF THE P		9	
Near RR Crossing		Yes			THE RESERVE OF THE PARTY OF THE			
Distance from previous STOP		Yes	*		100			
Volume Cross Product Total Crashes		≥ 100,000 >0	*		拉斯 里尔			
Total Grasiles			***				A CONTRACTOR OF THE PARTY OF TH	
D	((
Describe Proposed Safet	y improve	ements						
	Description			Units	Cost	Notes -		
	Roundabout	. , ,	per intersection	0	\$0.00			
Mainline Dynamic W	onal Median	. ,	per intersection per intersection	0 0	\$0.00 \$0.00			
	ose Median		per intersection	0	\$0.00			
Installing S	Street Lights	\$6,000	per street light	1	\$6,000.00			
	e Stop Šign		per sign	2	\$700.00			
Upgrade Ju Upgrade Stop	Inction Sign		per sign per sign	2 2	\$700.00 \$900.00			
Upgrade Stop Ahe			per sign per marking	1	\$450.00			
	de Stop Bar		per marking	1	\$250.00			
Review Sigr	ns and CST	\$2,450	per intersection	0	\$0.00			
Signs and Markings and Street L	ight project	t costs vary by the numb	er of minor legs associa	ated with the inte	\$9,000.00			
Project Cost Estimate (at			<u> </u>		I Year of Con	struction		
_								
Fed Local Match (10% of Total p	deral Funds							
	oject Cost		_					
	-							
NDDOT Central Office Or			Deference Number			ID Norselese	T	
Project Accepted? Notes	Yes	□No	Reference Number			ID Number		
							Page: 9	
						Inte	ersection ID: 1.03	
							Date: 10/23/2013	

HIGHWAY SAFETY IN	/PROVE	MENT PROGRA	M (HSIP) PROJEC	Τ ΔΡΡΙ Ι	ICATION		
North Dakota Department of SFN 59959 (06-2011)			(11011) 1 110020	. ,			
		84th	St NE (Pembina	11) &	US 81		
Agency Name:					DOT Distric	•	
Contact Name:	-			Telep	hone Numbe	r: 701-265-42	08
Email Address:							
Please attach a location map(s).	You may us	se additional sheets to f	urther describe your project				
Location Description							
							heck all that apply)
Configuration:	X	Traffic Control Device:	Thru/Ston			hol Impaired Driv	estraints for all Occupants
Configuration (2):		Street Lights:	•			er/Older Driver S	
Űrban/Rural:		Flashers:			Curb Aggress		•
-	Pembina	Major Entering ADT:					ne Departure Crashes
Entering ADT:	635	Minor Entering ADT:	105				al Capabilities to Increase Survivabilit
				V	improve inter	section Safety	
Describe Current Safety	lssues & !	Systemic Ranking	Review				
North Dakota TBD, 2008 - 2012			years				
110.11. 24.10.44 1.22, 2000 2012		ŭ	, oa. o				
	Total	Angle	K+A			= 1/1	
Crashes		0	0.00				
Rate (per MVM)	0.0	0.0	0.0				
						- 48/	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
						//	
	Value	Critical	Risk Ranking				CHUKHAL SCINE
Skew	Yes	Yes	*			9 12	TO A COMMENT
On/Near Curve	Yes	Yes	*			1/10	AMERICA STORY
Development		Yes				1 01/1/2	
Near RR Crossing		Yes				1 900	化物物基本的工作的
Distance from previous STOP Volume Cross Product		Yes ≥ 100,000	*		1	A Market	
Total Crashes		≥ 100,000 >0			-		THE RESERVE
			***		7000	ALTER D	
Describe Proposed Safet	y Improve	ements					
	Description	Unit Cost		Units	Cost	Notes -	
	Roundabout		per intersection	0	\$0.00	110103	
Direction	onal Median	\$750,000	per intersection	0	\$0.00		
Mainline Dynamic W			per intersection	0	\$0.00		
	ose Median		per intersection	0	\$0.00		
	Street Lights e Stop Sign		per street light per sign	0 2	\$0.00 \$700.00		
	unction Sign		per sign	2	\$700.00		
Upgrade Stop			per sign	2	\$900.00		
Upgrade Stop Ahe	•	•	per marking	1	\$450.00		
. 0	de Stop Bar	·	per marking	1	\$250.00		
Review Sigr	is and CST	\$2,450	per intersection	0	\$0.00 \$3.000.00		
Signs and Markings and Street L	_iaht proiect	costs vary by the numb	er of minor leas associated	with the inte	* - ,		
Project Cost Estimate (at					d Year of Con	struction	
,							
	deral Funds	\$2,700					
Local Match (10% of Total p		\$300	-				
l otal Pro	oject Cost	\$3,000					
NDDOT Central Office Or	alv		ļ.				
Project Accepted?		□No	Reference Number			ID Number	
Notes			1			1	1
							Page: 10
						Inte	ersection ID: 11.01
							Date: 10/23/2013

HIGHWAY SAFETY IN	IDROVE	MENT PROGRA	M (HSID) DRO IE	CT ADDI I	CATION		
North Dakota Department of ⁻ SFN 59959 (06-2011)			im (Hon) i Root	IOT ATT LI	DATION		
		84th St NE (P	embina 11) &	Interstate	29 NB R	amps	
Agency Name:					DOT Distric		
Contact Name:				Teleph	one Numbe	r: 701-265-42	08
Email Address:			and an income the control of				
Please attach a location map(s). Location Description	You may us	se additional sheets to f	urther describe your proj	ject			
Location Description				1	SHSP F	mnhasis Area (ch	neck all that apply)
						hol Impaired Driv	11 27
Configuration:		Traffic Control Device:					straints for all Occupants
Configuration (2): Urban/Rural:		Street Lights: Flashers:				ver/Older Driver S	afety
	Pembina	Major Entering ADT:			Curb Aggress		e Departure Crashes
Entering ADT:		Minor Entering ADT:					al Capabilities to Increase Survivability
				✓		rsection Safety	
Describe Current Safety I	leeune &	Svetomic Panking	Paview				
North Dakota TBD, 2008 - 2012			years				
·			•				
Crashes	Total 0	Angle 0	0.00			A HE	A CONTRACTOR
Rate (per MVM)		0.0	0.00				
					/MB-	SEA VIEW	
	\/=l	Orisinal	Diale Dandring				
Skew	Value No	Critical Yes	Risk Ranking		A P		
On/Near Curve		Yes	*		N. N.	No married of P	7100
Development	No	Yes				Market / / Mr.	
Near RR Crossing		Yes	*			1 // 0	31102
Distance from previous STOP Volume Cross Product		Yes ≥ 100,000	*				
Total Crashes		≥ 100,000 >0					

Describe Proposed Safet	v Improve	omonts					
Describe Freposed Garet	ympiore	monto					
	Description	Unit Cost		Units	Cost	Notes	
	Roundabout onal Median	+ //	per intersection per intersection	0 0	\$0.00 \$0.00		
Mainline Dynamic W			per intersection	0	\$0.00		
	ose Median		per intersection	0	\$0.00		
	Street Lights		per street light	0 2	\$0.00		
Upgrade Ju	e Stop Sign		per sign per sign	2	\$700.00 \$700.00		
Upgrade Stop			per sign	2	\$900.00		
Upgrade Stop Ahe	•	•	per marking	2	\$900.00		
. •	de Stop Bar		per marking	2	\$500.00		
Review Sigr	is and CST	\$2,450	per intersection	0	\$0.00 \$3.700.00	_	
Signs and Markings and Street L	ight project	costs vary by the numb	er of minor legs associa	ted with the inte	+-,		
Project Cost Estimate (at	tach deta	iled copy)		Proposed	Year of Cor	nstruction	
Eor	deral Funds	\$3,330					
Local Match (10% of Total p		\$3,330					
	ject Cost		-				
AIDDOT O (LOW) O.							
NDDOT Central Office Or Project Accepted?		□No	Reference Number			ID Number	T T T T T T T T T T T T T T T T T T T
Notes			reference rumber	<u> </u>		ID Number	
							Page: 11
						Inte	ersection ID: 11.03
							Date: 10/23/2013

HIGHWAY SAFETY IMI	PROVE	MENT PROGRA	M (HSIP) PROJE	CT APPLI	CATION		
North Dakota Department of To SFN 59959 (06-2011)		tion Programming	. ,				
		ND 5 (V	V) & 137th Ave	NE (Pem	nbina 12)		
Agency Name: F				ND	DOT District	:: 6	
Contact Name: 1				Teleph	one Number	: 701-265-42	08
Email Address: p							
Please attach a location map(s).	ou may us	se additional sheets to fu	urther describe your proje	ect			
Location Description							
							neck all that apply)
Configuration: >	<	Traffic Control Device:	Thru/Ston			ol Impaired Driv	straints for all Occupants
Configuration (2): L		Street Lights:	•			er/Older Driver S	
Urban/Rural: F		Flashers:			Curb Aggress		
County: F		Major Entering ADT:					e Departure Crashes
Entering ADT: 1	445	Minor Entering ADT:	85				al Capabilities to Increase Survivability
				✓	Improve Inters	section Safety	
Describe Current Safety Is	CHOC &	Systemic Panking	Poviow				
North Dakota TBD, 2008 - 2012	sues & c		years				
1101111 Ballotta 188, 2000 2012		Ü	youro				
	Total	Angle	K+A		机多层线 医甲		(F-C(7))
Crashes	0	0	0.00				
Rate (per MVM)	0.0	0.0	0.0		· Marie Language		
					A STATE OF THE STA	And a Park	
						aka 5	A CONTRACTOR OF THE PARTY OF TH
	Value	Critical	Risk Ranking		A RESE		Charle 1
Skew	No	Yes	· ·			1	6
On/Near Curve	Yes	Yes	*			AV III	
Development	No	Yes			p Contrary		
Near RR Crossing	No	Yes				A STATE OF THE STA	Control of the Contro
Distance from previous STOP Volume Cross Product	Yes Yes	Yes ≥ 100,000	*				7 7 7 7 7 7 7
Total Crashes	0	≥ 100,000 >0	*		全成下涨。	THE LANGE	Contoni
10101 01001100			***	<u>—</u>	的现在是一直完整		Google earth
Describe Proposed Safety	Improve	ements					
-	escription	Unit Cost		Units	Cost	Notes Curve	projects suggested on other sheets.
	oundabout		per intersection	0	\$0.00	_ Notes - Curve	projects suggested on other sneets.
	nal Median		per intersection	0	\$0.00		
Mainline Dynamic Wa	rning Sign	\$50,000	per intersection	0	\$0.00		
	se Median		per intersection	0	\$0.00		
Installing Str	reet Lights Stop Sign		per street light	1 2	\$6,000.00 \$700.00		
Upgrade Jun			per sign per sign	2	\$700.00		
Upgrade Stop A			per sign	2	\$900.00		
Upgrade Stop Ahea			per marking	1	\$450.00		
. 0	e Stop Bar	·	per marking	1	\$250.00		
Review Signs	and CST	\$2,450	per intersection	0	\$0.00	_	
Signs and Markings and Street Lig	aht project	costs yary by the numb	er of minor leas associat	ted with the inte	\$9,000.00		
Project Cost Estimate (atta			er or minor legs associat		Year of Con	struction	
1 10jest 60st Estimate (att	ion actar	ica copy)		Порозси	rear or con	50,000,011	
Fede	eral Funds	\$8,100					
Local Match (10% of Total pro		\$900	<u>-</u>				
Total Proj	ect Cost	\$9,000					
AIDDOT Control Office Onl							
NDDOT Central Office Onl		□No	Peference Number			ID Number	T
Notes	rest	□ NO	Reference Number			ID Number	
140103							
						1	Page: 12
						Inte	ersection ID: 12.03 Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT P North Dakota Department of Transportation Program		T APPLICATION	
SFN 59959 (06-2011)	_		
	ND 5 (E) & 137th Ave NI	IE (Pembina 12)	
Agency Name: Pembina County		ND DOT District: 6	
Contact Name: Troy Kittelson		Telephone Number: 701-265-4208	
Email Address: pembhwy@nd.gov Please attach a location map(s). You may use additional		•	
Location Description	sheets to further describe your project	t .	
200ation Decomption		SHSP Emphasis Area (check all that apply)	
		☐ Reduce Alcohol Impaired Driving	
· ·	trol Device: Thru/Stop	 ☐ Increase the Use of Safety Restraints for all Occupants ☐ Younger Driver/Older Driver Safety 	
Urban/Rural: Rural	reet Lights: No Flashers: No	☐ Curb Aggressive Driving	
	tering ADT: 1650	☐ Improvements to Address Lane Departure Crashes	
Entering ADT: 1787 Minor En	tering ADT: 137	☐ Enhancing Emergency Medical Capabilities to Increase \$	Survivability
		☑ Improve Intersection Safety	
Describe Current Safety Issues & Systemic	Ranking Review		
North Dakota TBD, 2008 - 2012	5 years		
Total And	rle K+A		
Total And Crashes 0			
Rate (per MVM) 0.0 0.		Land To Market and Control of the Co	
		The same of the last of the la	
Value Crit	ical Risk Ranking	Management of the Control of the Con	
Skew No Ye			
On/Near Curve No Ye	es		
Development Yes Ye		The same of the sa	
Near RR Crossing No Ye Distance from previous STOP Yes Ye			
Volume Cross Product Yes ≥ 100		MAIN CENTER OF THE PARTY OF THE	
Total Crashes 0 >	•	MAX.CI	
	***	The state of the s	
Describe Proposed Safety Improvements			
December 1189	0	Helle Oct No. Oct Alle	
Description Unit	Cost C1,000,000 per intersection	Units Cost Notes - Segment projects suggested on \$0.00 sheets.	other
Directional Median	\$750,000 per intersection	0 \$0.00 SHEETS.	
Mainline Dynamic Warning Sign	\$50,000 per intersection	0 \$0.00	
Close Median	\$25,000 per intersection	0 \$0.00	
Installing Street Lights Upgrade Stop Sign	\$6,000 per street light \$350 per sign	1 \$6,000.00 2 \$700.00	
Upgrade Junction Sign	\$350 per sign	2 \$700.00	
Upgrade Stop Ahead Sign	\$450 per sign	2 \$900.00	
Upgrade Stop Ahead Marking Upgrade Stop Bar	\$450 per marking \$250 per marking	1 \$450.00 1 \$250.00	
Review Signs and CST	\$2,450 per intersection	1 \$250.00 0 \$0.00	
Treate and a second a second and a second an		\$9,000.00	
Signs and Markings and Street Light project costs vary b			
Project Cost Estimate (attach detailed copy)	' P	Proposed Year of Construction	
Federal Funds \$8, ⁷	100		
Local Match (10% of Total project cost) \$90			
Total Project Cost \$9,0	000		
NDDOT Central Office Only			
Project Accepted?	Reference Number	ID Number	
Notes			
		Page: 13 Intersection ID: 12.04	
		Date: 10/23/2013	

HIGHWAY SAFETY IN	/DDOVE	MENT PROCEA	M (USID) DDO IE	CT ADDI I	CATION		
North Dakota Department of SFN 59959 (06-2011)			IWI (HSIF) PROJE	CI APPLI	CATION		
		107th St NE (F	Pembina 55) &	Interstat	e 29 SB R	amps	
Agency Name:					DOT District		
Contact Name:	-			Teleph	none Number	: 701-265-420	08
Email Address: Please attach a location map(s).			urthar dagariha yayr arai	oot			
Location Description	You may us	se additional sheets to h	urtrier describe your proje	eci			
Location Description					SHSP Em	nphasis Area (ch	neck all that apply)
						ol Impaired Drivi	S .
Configuration:		Traffic Control Device:	•				straints for all Occupants
Configuration (2): Urban/Rural:		Street Lights: Flashers:			Curb Aggressi	r/Older Driver Sa ve Driving	arety
	Pembina	Major Entering ADT:					e Departure Crashes
Entering ADT:	1938	Minor Entering ADT:	853				l Capabilities to Increase Survivability
				✓	Improve Inters	ection Safety	
Describe Current Safety	Issues &	Systemic Ranking	Review				
North Dakota TBD, 2008 - 2012			years				
	Total	Anala	IZ . A				
Crashes	Total 0	Angle 0	K+A 0.00	_		156	
Rate (per MVM)		0.0	0.0				
					0.00		
	Value	Critical	Risk Ranking				
Skew		Yes				THE REAL PROPERTY.	
On/Near Curve		Yes	*		10	- 17	
Development		Yes Yes					
Near RR Crossing Distance from previous STOP		Yes	*			1/1	
Volume Cross Product		≥ 100,000	*			The Land	R or
Total Crashes	0	>0					A CONTRACTOR OF THE PARTY OF TH
			***			A CONTRACTOR OF THE PARTY OF TH	
Describe Proposed Safet	y Improve	ements					
	Description	Unit Cost		Units	Cost	Notes - Seame	ent and curve projects suggested on
	Roundabout		per intersection	0	\$0.00	other sheets.	on and daive projects suggested on
	onal Median	. ,	per intersection	0	\$0.00		
Mainline Dynamic W			per intersection per intersection	1	\$50,000.00		
	lose Median Street Lights		per intersection per street light	0 2	\$0.00 \$12,000.00		
Upgrad	e Stop Sign	\$350	per sign	2	\$700.00		
	unction Sign		per sign	2	\$700.00		
Upgrade Stop Upgrade Stop Ahe			per sign per marking	2 2	\$900.00 \$900.00		
. •	de Stop Bar		per marking	2	\$500.00		
Review Sign	•		per intersection	0	\$0.00	<u> </u>	
Ciana and Markings and Street I	liaht project	acata wan bu tha numb	or of minor land appoint	tad with the inte	\$65,700.00		
Signs and Markings and Street L Project Cost Estimate (at			er or minor legs associat		Year of Cons	struction	
r roject Goot Zetimute (us	tuon uotu	nou copy)			rour or com		
	deral Funds						
Local Match (10% of Total pro	oroject cost) oject Cost	\$6,570 \$65,700	_				
Totalite	Ject Cost	ψ05,700					
NDDOT Central Office Or	ıly						
Project Accepted?	Yes	□No	Reference Number			ID Number	
Notes							
							Page: 14
						Inte	rsection ID: 55.05
							Date: 10/23/2013

	<u>IDBOVE</u>	MENT DROCEA	M (Help) ppo is	CT ADDI IC	PATION		
HIGHWAY SAFETY IN North Dakota Department of SFN 59959 (06-2011)			M (HSIP) PROJE	CI APPLIC	ATION		
		ND 66	& 161st Ave N	IE (Pembi	na 500)		
Agency Name: Contact Name: Email Address:	Troy Kitte	elson y@nd.gov		Telepho	DOT Districtions Number	t: 6 r: 701-265-42	208
Please attach a location map(s).	You may us	se additional sheets to for	urther describe your proj	ject			
Location Description					SHSD E	mphasis Aroa (c	heck all that apply)
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Pembina	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	Yes No 1763		Reduce Alcoh Increase the U Younger Drive Curb Aggress Improvements Enhancing Er	nol Impaired Driv Use of Safety Ro er/Older Driver S sive Driving s to Address Lai	ring estraints for all Occupants
Describe Current Safety							
North Dakota TBD, 2008 - 2012		5	years				
Crashes Rate (per MVM)		Angle 0 0.0	K+A 0.00 0.0	<u> </u>			a ge
	Value	Crisinal	Diele Deeleise				
Skew	Value No	Critical Yes	Risk Ranking	_			Account of the Party of the Par
On/Near Curve		Yes			4	BE I	
Development Near RR Crossing		Yes Yes	*				
Distance from previous STOP		Yes	^		ETTO		
Volume Cross Product Total Crashes		≥ 100,000 >0	*				
			***	_			
Describe Proposed Safet	y Improve	ements					
	Description	Unit Cost		Unito	Cost	Notes	
	Description Roundabout		per intersection	Units 0	Cost \$0.00	Notes	
	onal Median	\$750,000	per intersection	0	\$0.00		
Mainline Dynamic W	/arning Sign ose Median		per intersection per intersection	0 0	\$0.00 \$0.00		
Installing S	Street Lights		per street light	Installed	\$0.00		
	e Stop Sign		per sign	4	\$1,400.00		
Upgrade Stop	unction Sign Ahead Sign		per sign per sign	4 4	\$1,400.00 \$1,800.00		
Upgrade Stop Ahe	ead Marking	\$450	per marking	4	\$1,800.00		
Upgrad Review Sigr	de Stop Bar	•	per marking per intersection	4 0	\$1,000.00 \$0.00		
5		. ,	•	-	\$7,400.00	_	
Signs and Markings and Street L Project Cost Estimate (at			er of minor legs associat		section. Year of Con	etruction	
Project Cost Estimate (at	lacii uela	neu copy)		Froposeu	Teal Of Con	istruction	
	deral Funds	\$6,660					
Local Match (10% of Total p Total Pro	oject Cost	\$740 \$7,400	=				
	•						
NDDOT Central Office Or			ID-fN			IID N	
Project Accepted? Notes	Yes	No	Reference Number			ID Number	
							Page: 15
						Int	ersection ID: 500.01 Date: 10/23/2013

HIGHWAY SAFETY IN			M (HSIP) PROJE	CT APPLIC	ATION		
North Dakota Department of SFN 59959 (06-2011)	Transportat	ion Programming					
		86th St NE (Pe	embina 502) &	Interstate	29 NB R	amps	
Agency Name:					OOT District	•	
Contact Name:	-			Telepho	ne Numbei	: 701-265-42	08
Email Address: Please attach a location map(s).			urther describe your proj	ect			
Location Description	Tou may us	se additional sheets to h	urtiler describe your proj	eci			
200adon 2000npdon					SHSP Er	nphasis Area (ch	eck all that apply)
0 5 4	v	T (" 0	TI (0)			ol Impaired Drivi	· ·
Configuration: Configuration (2):		Traffic Control Device: Street Lights:	•			Jse of Safety Re er/Older Driver S	straints for all Occupants
Urban/Rural:		Flashers:			Curb Aggress		arety
_	Pembina	Major Entering ADT:			•		e Departure Crashes
Entering ADT:	103	Minor Entering ADT:	33			nergency Medica section Safety	Il Capabilities to Increase Survivabili
- "							
Describe Current Safety I North Dakota TBD, 2008 - 2012			Review years				
1401111 Dakota 1 DD, 2000 - 2012		3	years				
	Total	Angle	K+A	_		100	
Crashes Rate (per MVM)		0 0.0	0.00 0.0				
rtate (per invivi)	0.0	0.0	0.0	- 1			
	17-1	Octobra	Dist Destina		Paul Paul		
Skew	Value Yes	Critical Yes	Risk Ranking ★	_			
On/Near Curve		Yes	*		LET SECTION	OFFICE OF THE PARTY OF THE PART	
Development		Yes		- 1		11/19	
Near RR Crossing Distance from previous STOP		Yes Yes	*				
Volume Cross Product		≥ 100,000	^		B. B.	1	
Total Crashes	0	>0					COLUMN TO SERVICE STATE OF THE PARTY OF THE
			***	L			
Describe Proposed Safet	y Improve	ements					
	Description	Unit Cost		Units	Cost	Notes - Seam	ent projects suggested on other
	Roundabout		per intersection	0	\$0.00	sheets.	on projects suggested on other
	onal Median		per intersection	0	\$0.00		
Mainline Dynamic W	ose Median	. ,	per intersection per intersection	0 0	\$0.00 \$0.00		
	Street Lights		per street light	0	\$0.00		
	e Stop Sign		per sign	2	\$700.00		
Upgrade Ju Upgrade Stop	Inction Sign		per sign per sign	2 2	\$700.00 \$900.00		
Upgrade Stop Ahe		•	per marking	2	\$900.00		
1 0	de Stop Bar		per marking	2	\$500.00		
Review Sigr	is and CST	\$2,450	per intersection	0	\$0.00 \$3,700.00		
Signs and Markings and Street L	_ight project	costs vary by the numb	er of minor legs associat	ted with the inters	. ,		
Project Cost Estimate (at	tach deta	iled copy)		Proposed `	Year of Con	struction	
Fed	deral Funds	\$3,330					
Local Match (10% of Total p		\$370	_				
Total Pro	oject Cost	\$3,700					
NDDOT Central Office Or	nly						
Project Accepted?		□No	Reference Number			ID Number	
Notes							
							Page: 16
						Inte	rsection ID: 502.02
							Date: 10/23/2013

23 USC 409 NDDOT Reserves All Objections

Ramsey County

Ramsey County Rural Segment Projects

Page	Corridor ID	Route #	Start	End	Length	Risk Ranking	6" Edge Lines	Edge Rumble Strip	6" Center Line	Project Cost (\$)
1	1.01	Ramsey 1	Start of Ramsey 1	Intersection with ND 20	3.8	****	3.8	0.0	3.8	\$4,940.00
2	4.01	Ramsey 4	Intersection with US 2	Intersection with 55th Street	13.0	***	0.0	13.0	0.0	\$45,500.00
3	2.01	Ramsey 2	Intersection with Elks Drive	Intersection with 96th Avenue	13.0	***	0.0	13.0	0.0	\$45,500.00
4	3.01	Ramsey 3	Intersection with 48th Street	Intersection with ND 17	21.2	***	0.0	21.2	0.0	\$74,200.00
5	507.01	No designation	Intersection with US 2	Intersection with 48th Street	0.8	***	0.0	0.8	0.0	\$2,800.00
6	508.01	No designation	End of road at lake	Intersection with ND 20	2.0	***	0.0	2.0	0.0	\$7,000.00
							3.8	50.0	3.8	\$179,940.00

Ramsey County Rural Segment Listing

Project Sheet Page*	Corridor	Route	Start	End	Length (miles)	Lane Departure Crashes	ADT	Lane Departure Density	Access Density	Curves w/ Critical Radius / Mile	Edge Risk Assesment
1	1.01	Ramsey 1	Start of Ramsey 1	Intersection with ND 20	3.8	4	1,791	0.21	12.6	0.52	2
3	2.01	Ramsey 2	Intersection with Elks Drive	Intersection with 96th Avenue	13.0	3	486	0.05	7.6	0.00	2
4	3.01	Ramsey 3	Intersection with 48th Street	Intersection with ND 17	21.2	2	263	0.02	5.9	0.09	2
	3.02	Ramsey 3	Intersection with ND 17	Ramsey/Cavalier County Line	9.8	0	222	0.00	7.2	0.20	1
2	4.01	Ramsey 4	Intersection with US 2	Intersection with 55th Street	13.0	0	166	0.00	5.7	0.31	3
	4.03	Ramsey 4	Intersection with 61st Street	Intersection with ND 17	8.7	0	60	0.00	6.2	0.23	2
	7.02	Ramsey 7	Intersection with 105th Avenue	Intersection with ND 1 (S)	0.9	0	187	0.00	16.8	0.00	1
	8.01	Ramsey 8	Intersection with ND 20 / 81st Avenue	Intersection with 91st Avenue (S)	10.0	1	168	0.02	6.6	0.00	2
	8.02	Ramsey 8	Intersection with 91st Avenue (N)	Intersection with ND 1	14.3	0	89	0.00	7.8	0.28	2
	9.02	Ramsey 9	Intersection with ND 1	Ramsey / Walsh County Line	9.0	1	31	0.02	7.2	0.00	1
	504.01	No designation	Crary south city limit (approx 1250 feet south of Lyle Street intersection)	Crary south city limit (approx 1250 feet south of Lyle Street intersection)	1.6	0	210	0.00	22.7	0.00	1
	505.01	Woods_Rutten Road	Ramsey/Benson County Line	Intersection with US 2	3.3	0	530	0.00	4.5	0.90	3
	506.01	Grahams Island Road	Intersection with 43rd Street	Intersection where 72nd tees into Park Avenue	1.2	0	140	0.00	6.6	0.00	3
	506.02	Grahams Island Road	Interesection with 48th Street	Intersection with ND 19	3.1	0	145	0.00	4.8	0.00	3
5	507.01	No designation	Intersection with US 2	Intersection with 48th Street	0.8	1	666	0.25	15.3	1.27	1
6	508.01	No designation	End of road at lake	Intersection with ND 20	2.0	0	458	0.00	14.1	0.50	1
				·	115.7	12					

Risky' - NEITHER shoulder or good clear zone Either a shoulder OR good clear zone BOTH shoulder and a good clear zone
Critical ADT Range - Lane Departure
150

Edge Risk Legend

Critical Radius Curves 15 115.7 Lane Departure 12 115.7 0.02 0.13

150 500

Ramsey County Rural Segment Prioritization - Lane Departure Priority

													Tiebre	akers
#	Corridor	Route	Start	End	Length	ADT	ADT Range	Lane Departure Density	Access Density	Curve Critical Radius Density	Edge Risk	Totals	Edge Risk	ADT
1	1.01	Ramsey 1	Start of Ramsey 1	Intersection with ND 20	3.8	1,791		*	*	*	*	****	2	1,791
2	4.01	Ramsey 4	Intersection with US 2	Intersection with 55th Street	13	165.5	*			*	*	***	3	166
3	2.01	Ramsey 2	Intersection with Elks Drive	Intersection with 96th Avenue	13	486.25	*	*			*	***	2	486
4	3.01	Ramsey 3	Intersection with 48th Street	Intersection with ND 17	21.2	263	*			*	*	***	2	263
5	507.01	No designation	Intersection with US 2	Intersection with 48th Street	0.8	666		*	*	*		***	1	666
6	508.01	No designation	End of road at lake	Intersection with ND 20	2	457.5	*		*	*		***	1	458
7	505.01	Woods_Rutten Road	Ramsey/Benson County Line	Intersection with US 2	3.3	530				*	*	**	3	530
8	8.01	Ramsey 8	Intersection with ND 20 / 81st Avenue	Intersection with 91st Avenue (S)	10	168.25	*				*	**	2	168
9	8.02	Ramsey 8	Intersection with 91st Avenue (N)	Intersection with ND 1	14.3	88.5				*	*	**	2	89
10	4.03	Ramsey 4	Intersection with 61st Street	Intersection with ND 17	8.7	60				*	*	**	2	60
13	3.02	Ramsey 3	Intersection with ND 17	Ramsey/Cavalier County Line	9.8	221.5	*			*		**	1	222
14	504.01	No designation	Crary south city limit (approx 1250 feet south of Lyle Street intersection)	Crary south city limit (approx 1250 feet south of Lyle Street intersection)	1.6	210	*		*			**	1	210
15	7.02	Ramsey 7	Intersection with 105th Avenue	Intersection with ND 1 (S)	0.9	186.5	*		*			**	1	187
16	506.02	Grahams Island Road	Interesection with 48th Street	Intersection with ND 19	3.1	145					*	*	3	145
17	506.01	Grahams Island Road	Intersection with 43rd Street	Intersection where 72nd tees into Park Avenue	1.2	140					*	*	3	140
18	9.02	Ramsey 9	Intersection with ND 1	Ramsey / Walsh County Line	9	31							1	31
						al Stars	8	3	5	9	10			
					% That Ge	ets Star	50%	19%	31%	56%	63%			

	#	%	%
****	0	0%	0%
****	1	6%	3%
***	5	31%	43%
**	7	44%	42%
*	2	13%	4%
	1	6%	8%
	16	100%	100%

Stars

ADT Range - It segment has an ADT in the range of most at risk ADT based on Northeast totals. (150 < ADT < 500)

Lane Departure Density - If segment has higher lane departure density than the Northeast average (0.032).

Access Density If segment has access density than the nationwide average (8).

Curve Critical Radius Density - If segment has higher density of curves with critical radius than the Northeast average (0.084).

Edge Risk Assessment - Edge risk of 2 or 3, based on assessment of roadway edge and clear zone.

HIGHWAY SAFETY IM	PROVEMENT PROG	RAM (HSIP)	PROJECT	APPL	ICATION	<u> </u>
North Dakota Department of T SFN 59959 (06-2011)		` ,				<u> </u>
	Ramsey 1 fron	Start of Ra	amsey 1	to Inte	ersection	on with ND 20
Agency Name: F			ND DOT I			
Contact Name: I		т	elephone N		_	7015
	nwydept@stellarnet.con		olopilollo i			
Please attach a location map(s).			vour project.			
Location Description			усы ресуссы			
					S	HSP Emphasis Area (check all that apply)
Start: S	Start of Ramsey 1	Lane Width	: 12'			cohol Impaired Driving
	ntersection with ND 20	Speed Limit	:: High		Increase th	e Use of Safety Restraints for all Occupants
Facility Type: 2		Shoulder Width				river/Older Driver Safety
ADT: 1		Shoulder Type				essive Driving
Road Type F		Length (miles)		☑		ents to Address Lane Departure Crashes
County Road F	Ramsey 1	Rumble Installed	I: NO			Emergency Medical Capabilities to Increase Survivability tersection Safety
					iiiibiove iiii	lersection Salety
Describe Current Safety Is	ssues & Systemic Rank	ina Review				
North Dakota Crashes, 2008 - 20			5 years			
		·	, , , , , , ,		Remesy	RINGS911,JPG CHEMPILL
	Total	Road Dept	K+A		48th Street /	47th Street / Lake
Crashes	21	3	0		- Colons	
Density (per mile per year)	1.11	0.16	0.00			
Rate (per MVM)	1.69	0.24	0.00			
					4	
					No.	
	Value	Critical	Road		Barre .	
ADT Range	1,791	150≤ADT≤500	rtoad		NA ALE	The Annual Control of the Control of
RD Density	0.210	0.032	*		1000	
Access Density	12.6	8.0	*		-	
Curve Critical Radius Density	0.524	0.084	*		wee or	
Edge Risk	2	2 or 3	*		N 48.0876250	r coe
			****		W 98.9122633	SRF
Describe Proposed Safety	/ Improvements					
Describe i roposed Sarety	mprovements					
	Description	Type	Cost per mi	Mileage	Cost	Notes - Noise Sensitive. Curve and intersection projects
-	4" Edge Lines	Proactive	\$400	0.0	\$0	suggested on other sheets.
	6" Edge Lines	Proactive	\$650	3.8	\$2,470	suggested on other endets.
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Ground	In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0	
<u> </u>	6" Center Line	Proactive	\$650	3.8	\$2,470	_
Project Cost Estimate (att	tach dotailed conv)			Dronos	nd Vaar o	of Construction
Froject Cost Estimate (att	acii detalled copy)			FTOPUS	eu rear o	Construction
	Federal Funds	\$4,446				
Local Matc	h (10% of Total project cost)	\$494				
	Total Project Cost	\$4,940	_			
NDDOT Central Office On	ly					
]Yes □No R	eference Number				ID Number
Notes						
						Page: 1
						Segment ID: 1.01 Date: 10/24/2013
						Date. 10/24/2013

HIGHWAY SAFETY IN North Dakota Department of			. ACCEOI	ALLE	JAHON	•				
SFN 59959 (06-2011)	Ramsey 4 from Inte	rsection w	ith US 2	to Inte	ersectio	on with 55th Street				
	Ramsey County	, occion w	ND DOT I			m with com on our				
	Kevin Fieldsend	т	elephone N		_	7015				
	hwydept@stellarnet.con									
Please attach a location map(s).			your project.							
Location Description	•									
						HSP Emphasis Area (check all	that apply)			
	Intersection with US 2	Lane Width				cohol Impaired Driving				
End: Facility Type:	Intersection with 55th Street	Speed Limit Shoulder Width	•			e Use of Safety Restraints for a river/Older Driver Safety	II Occupants			
ADT:		Shoulder Type				essive Driving				
	Rural Paved	Length (miles)		abla		ents to Address Lane Departure	Crashes			
County Road	Ramsey 4	Rumble Installed	I: No			Emergency Medical Capabilities	s to Increase Survivability			
					Improve Int	ersection Safety				
Describe Current Safety	leeuee & Systemic Pank	ina Poviow								
North Dakota Crashes, 2008 - 20			5 years							
110.11. 24.1014 0.140.100, 2000 2	·	·	, y ca. c		Ramany	PRINCOSCILIPG	CHOMHEL			
	Total	Road Dept	K+A		e Morth					
Crashes	6	0	0							
Density (per mile per year)	0.09	0.00 0.00	0.00							
Rate (per MVM)	1.53	0.00	0.00							
	Value	Critical	Road							
ADT Range	166	150≤ADT≤500	*							
RD Density Access Density	0.000 5.7	0.032 8.0					The second second			
Curve Critical Radius Density	0.307	0.084	*		-					
Edge Risk	3	2 or 3	*		WGS-84 N 48 0603100					
<u> </u>			***		W 98-5520133		SRF			
Describe Proposed Safet	y Improvements									
	Description	Type	Cost per mi	Miloago	Cost	Notes Curve and interception	a projecte auggested on other			
-	4" Edge Lines	Proactive	\$400	0.0	\$0	Notes - Curve and intersection sheets.	i projects suggested on other			
	6" Edge Lines	Proactive	\$650	0.0	\$0	onocio.				
	Edge Rumble Strip	Proactive	\$3,500	13.0	\$45,500					
Groun	d In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0					
	Center Line Rumble Strip 6" Center Line	Proactive Proactive	\$3,000	0.0	\$0 \$0					
-	6 Center Line	Proactive	\$650	0.0	Φ0	_				
Project Cost Estimate (at	tach detailed copy)			Propos	ed Year o	of Construction				
,	17/			•						
	Federal Funds	\$40,950								
Local Mate	ch (10% of Total project cost)	\$4,550	_							
	Total Project Cost	\$45,500								
NDDOT Central Office Or	alv									
		teference Number				ID Number				
Notes	2.65									
						Page: Segment ID:	2 4.01			
						Segment iD: Date:	10/24/2013			
						Date.	. 5,2 ,,25 , 6			

HIGHWAY SAFETY IM	PROVEMENT PROG	RAM (HSID) I	PRO IFCT	VDDI	ICATION	
North Dakota Department of T SFN 59959 (06-2011)			FROJECT	AFFL	ICATION	
, ,	sev 2 from Interse	ction with E	Elks Driv	e to Ir	ntersect	tion with 96th Avenue
Agency Name: R Contact Name: K	Ramsey County		ND DOT I	District:	3	
	wydept@stellarnet.com					
Please attach a location map(s).	You may use additional sheets	to further describe	your project.			
Location Description						
End: Ir Facility Type: 2 ADT: 4 Road Type R County Road R	86 tural Paved tamsey 2	Lane Width Speed Limit Shoulder Width Shoulder Type Length (miles) Rumble Installed	: High : 2' : Paved : 13.0		Reduce Alc Increase the Younger Dr Curb Aggre Improvement Enhancing	HSP Emphasis Area (check all that apply) sohol Impaired Driving e Use of Safety Restraints for all Occupants river/Older Driver Safety sissive Driving nts to Address Lane Departure Crashes Emergency Medical Capabilities to Increase Survivability ersection Safety
Describe Current Safety Is						
North Dakota Crashes, 2008 - 20	12	5	5 years			
	Total	Road Dept	K+A		48th Street	PLINGSCOOL,IPG
Crashes	19	3	0		West	
Density (per mile per year)	0.29	0.05	0.00			
Rate (per MVM)	1.65	0.26	0.00			
					1	
					+	The same of the sa
					The state of the last	March Street,
	Value	Critical	Road		La terror III	
ADT Range	486	150≤ADT≤500	*			
RD Density	0.046	0.032	*			
Access Density	7.6 0.000	8.0				
Curve Critical Radius Density Edge Risk	2	0.084 2 or 3	+		WGS-84	The second secon
Euge Nisk	2	2 01 3	***		N 48.1079317 W 98.7622450	SRF
Describe Proposed Safety	/ Improvements					
		_				
_	Description	Туре	Cost per mi		Cost	Notes - Intersection projects suggested on other sheets.
	4" Edge Lines	Proactive	\$400	0.0	\$0 \$0	
	6" Edge Lines Edge Rumble Strip	Proactive	\$650	0.0	\$0 \$45,500	
Ground	In Wet-Reflective Markings	Proactive Proactive	\$3,500 \$8,500	13.0 0.0	\$45,500 \$0	
Ground	Center Line Rumble Strip	Proactive	\$3,000	0.0	\$0 \$0	
	6" Center Line	Proactive	\$650	0.0	\$0	
_					· · · · · · · · · · · · · · · · · · ·	_
Project Cost Estimate (att	ach detailed copy)			Propos	ed Year o	f Construction
	Federal Funds	\$40,950				
Local Match	n (10% of Total project cost)	\$4,550				
Edda Mator	Total Project Cost	\$45,500	_			
	10141110,000 0000	Ψ-10,000				
NDDOT Central Office Onl	lv					
		eference Number	T .			ID Number
Notes						1
						Page: 3
						Segment ID: 2.01
						Date: 10/24/2013

HIGHWAY SAFETY IN			PROJECT	APPLI	CATION	l
North Dakota Department of ⁻ SFN 59959 (06-2011)	rransportation Programming					
R	amsey 3 from Inte	rsection wit	th 48th S	Street t	o Inter	section with ND 17
Agency Name:			ND DOT		-	
Contact Name:			elephone N	lumber:	701-662-	7015
	hwydept@stellarnet.con					
Please attach a location map(s).	You may use additional sheets	s to further describe	your project.			
Location Description				1		
Stort	ntersection with 48th Street	Lane Width	. 12'			HSP Emphasis Area (check all that apply) cohol Impaired Driving
	Intersection with ND 17	Speed Limit				e Use of Safety Restraints for all Occupants
Facility Type: 2		Shoulder Width				river/Older Driver Safety
ADT: 2	263	Shoulder Type				essive Driving
Road Type I		Length (miles)				ents to Address Lane Departure Crashes
County Road I	Ramsey 3	Rumble Installed	I: No			Emergency Medical Capabilities to Increase Survivability tersection Safety
					improve in	ersection salety
Describe Current Safety I	ssues & Systemic Rank	ing Review				
North Dakota Crashes, 2008 - 20			5 years			
	_				(Akumaray)	RIMSOSS, JPS CHOMBAL
01	Total	Road Dept	K+A	_	South	The second secon
Crashes Density (per mile per year)	7 0.07	2 0.02	0 0.00			
Rate (per MVM)	0.69	0.20	0.00			
(-	- 4	And the second second
						Part Carlotte
	Value	Critical	Road	-	100	
ADT Range RD Density	263 0.019	150≤ADT≤500 0.032	*		200	
Access Density	5.9	8.0			Barren State	
Curve Critical Radius Density	0.094	0.084	*		100	
Edge Risk	2	2 or 3	*	_	WGS-84 N 48 2579017	
			***		W 98.6602183	I SRF
Describe Proposed Safet	v Improvements					
Describe i roposed Saret	y improvements					
	Description	Type	Cost per mi	Mileage	Cost	Notes - Curve projects suggested on other sheets.
-	4" Edge Lines	Proactive	\$400	0.0	\$0	
	6" Edge Lines	Proactive	\$650	0.0	\$0	
	Edge Rumble Strip	Proactive	\$3,500	21.2	\$74,200	
Ground	d In Wet-Reflective Markings Center Line Rumble Strip	Proactive Proactive	\$8,500 \$3,000	0.0 0.0	\$0 \$0	
	6" Center Line	Proactive	\$5,000 \$650	0.0	\$0 \$0	
-						_
Project Cost Estimate (at	tach detailed copy)			Propose	ed Year o	of Construction
	E. J. J. E. J.	#00.700				
Local Mate	Federal Funds th (10% of Total project cost)	\$66,780 \$7,420				
Local Wate	Total Project Cost	\$74,200	_			
	Total Trojoot Cool	Ψ1 4,200				
NDDOT Central Office On	nly			ļ.		
		Reference Number				ID Number
Notes						
						Page: 4
						Segment ID: 4
						Date: 10/24/2013

	IDDOVEMENT DDOC	DAM (HCID)	DDA IECT	. VDDI i	IC A TION	ı
HIGHWAY SAFETY IM North Dakota Department of 1		` ,	FRUJECI	APPL	ICA I IUI	Y
SFN 59959 (06-2011)						
		ntersection				ction with 48th Street
Agency Name: I			ND DOT I	District:	3	
Contact Name: I			elephone N	lumber:	701-662-	7015
	hwydept@stellarnet.con					
Please attach a location map(s).	You may use additional sheets	s to further describe	your project.			
Location Description						
Ctort. I	ntersection with US 2	Lane Width	. 10'			HSP Emphasis Area (check all that apply) cohol Impaired Driving
	ntersection with 48th Street	Speed Limit				e Use of Safety Restraints for all Occupants
Facility Type: 2		Shoulder Width	0			river/Older Driver Safety
ADT: 6	666	Shoulder Type	: Gravel			essive Driving
Road Type F		Length (miles)				ents to Address Lane Departure Crashes
County Road I	No designation	Rumble Installed	I: No			Emergency Medical Capabilities to Increase Survivability
					improve in	tersection Safety
Describe Current Safety I	ssues & Systemic Rank	ina Review				
North Dakota Crashes, 2008 - 20			5 years			
			-		Remany	PONGOOT1.JPG CHONNIL
	Total	Road Dept	K+A		South	
Crashes Density (per mile per year)	2 0.50	1 0.25	0 0.00			
Rate (per MVM)	2.06	1.03	0.00			
rate (per inivity)	2.00	1.00	0.00			
	Value	Critical	Road			A CONTRACTOR OF THE PARTY OF TH
ADT Range	666	150≤ADT≤500				
RD Density	0.255	0.032	*			
Access Density Curve Critical Radius Density	15.3 1.275	8.0 0.084	* *			
Edge Risk	1.275	2 or 3	^		WGS-84	
- 9-			***		W 98.8327700	SRF
Describe Brancad Cafet	u Improvemente					
Describe Proposed Safety	y improvements					
	Description	Type	Cost per mi	Mileage	Cost	Notes - Intersection projects suggested on other sheets.
-	4" Edge Lines	Proactive	\$400	0.0	\$0	
	6" Edge Lines	Proactive	\$650	0.0	\$0	
_	Edge Rumble Strip	Proactive	\$3,500	0.8	\$2,800	
Ground	In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0 ©0	
	Center Line Rumble Strip 6" Center Line	Proactive Proactive	\$3,000 \$650	0.0 0.0	\$0 \$0	
-	O COMO LINO	110001110	φοσσ	0.0	ΨΟ	_
Project Cost Estimate (att	tach detailed copy)			Propos	ed Year c	of Construction
	Federal Funds	\$2,520				
Local Mato	th (10% of Total project cost)	\$280				
	Total Project Cost	\$2,800				
	,	. ,				
NDDOT Central Office On						
	☐ Yes ☐ No F	Reference Number				ID Number
Notes						
						Page: 5
						Segment ID: 507.01
						Date: 10/24/2013

North Dakotic Department of Transportation Programming STRY Modes (Security Contact Name: Korin Fieldsend Email Address: hywdepred Setellaretics to hurber describe your project. SRSP Emphasis Area (falex all that apopy) Facility Nye. 2 Lane SRSP Emphasis Area (falex all that apopy) Facility Nye. 2 Lan	HIGHWAY SAFETY IM	IPROVEMENT PROG	RAM (HSIP)	PROJECT	APPL	ICATION	1		
Agency Name: Ramsey County Contact Mane: Kevin Fieldsand Email Address: hwydept@Stellarnet.com Please attach a boardon megle): Your my use additional sheetes to further describe your project. Contact Mane: Kevin Fieldsand September Septemb	SFN 59959 (06-2011)								
Contact Name: Kevin Fieldsend Semilar Address: hwydopt@stellare.com Please attach a location ragiol.) You may use additional sheets to further describe your project.		No designation fr	om End of r	oad at la	ake to	Interse	ection	with ND 20	
Email Address: hwydopt@stollarnet.com Please attiched location map(s). You may use additional sheets to further describle your project. Contain Description									
Email Address: hwydept@stellarnet.com Please attaile a location map(a). You may use additional sheets to further describe your project. Location Description Start: End of road at lake First intersection with ND 2 Facility Type: 2 Lane Product Visits: 2 Facility Type: 2 Lane First Mark Type Run Favord County Road No designation Road Type Run Favord County Road No designation Road Type Run Favord County Road No designation Road Type Run Favord County Road No designation Describe Current Safety Issues & Systemic Ranking Review Norn Datolic Crashes 3 0 0.00 0.00 Rate (per MVM) 1.80 0.00 0.00 Curve Critical Radia Density 9.0504 0.004 4.5 Edge Risk 1 2 0.03 ** Edge Risk 1 2 0.03 ** Describe Proposed Safety Improvements Describe Proposed Safety Improvements Describe Proposed Safety Improvements Describe Proposed Safety Improvements Proactive \$450 0.0 \$3 Ground In West-Reflects Materings Proactive \$450 0.0 \$3 Ground In West-Reflects Materings Proactive \$450 0.0 \$3 Ground In West-Reflects Materings Proactive \$450 0.0 \$3 Local Match (10% of Total project Cost) \$7,000 Footer Line Project Cost \$7,000 NDDOT Central Office Only Project Cost Estimate (attach detailed copy) Project Radia Cock 1	Contact Name: I	Kevin Fieldsend	Т	elephone N	lumber:	701-662-	7015		
Please attach a location map(s). You may use additional sheets to further describe your project. Location Description Start: End of road at lake	Email Address: I	hwydept@stellarnet.cor		•					
SistSP Emphasis Area (check all that apply) Increase Emphasis Area (check all that apply) SistSP Emphasis Area (check all that apply) Increase Emphasis Area (check all that apply) Increase Emphasis Area (check all that apply) Increase Emphasis Area (check all that apply Incre				your project.					
Start: End of road at lake End: Internation with ND 20 Speed Limit: High Increased to Use of Salety Restraints for all Occupants Younged Driver/Older Driver Salety Tounged Driver/Older Driver Salety Tounged Driver/Older Driver Salety Tounged Driver Driver Driver Salety Tounged Driver Driver Driver Driver Salety Tounged Driver Driver Driver Driver Salety Tounged Driver Driver Driver Salety Tounged Driver Driver Driver Driver Driver Driver Salety Tounged Driver Driv		,		, , ,					
Encil Intersection with ND 20 Facility Type: 2-Land With 22 Applied Facility Type: 2-Paved Long Himself With: 2 Applied Road Type Raylar Paved Country Road No designation Poscribe Current Safety Issues & Systemic Ranking Review North Delota Crashes, 2008 - 2012 Total Road Dept K+A Density (per mile par year) 0.30 0.00 0.00 Rate (per MVM) 1.80 0.00 0.00 Rate (per MVM) 1.80 0.00 0.00 Poscribe Proposed Safety Improvements Poscribe Proposed Safety Improvements Describe Proposed Safety Improvements Describe Proposed Safety Improvements Proactive \$400 0.00 \$50 sheets. Describe Proposed Safety Improvements Proactive \$400 0.00 \$50 sheets. Proactive \$400 0.00 \$50 sheets. Ground In West-Residued Country Proactive \$400 0.00 \$50 sheets. Proper Cost Estimate (attach detailed copy) Project Cos	•					S	HSP Em	phasis Area (check a	ıll that apply)
Facility Type: 24-lane ADT: 458 Road Type Rural Paved Length (miles): 2.0 Rumbib Installed: No Rumbib Installed: N	Start: E	End of road at lake	Lane Width	: 12'		Reduce Ald	cohol Imp	paired Driving	
ADT 468 Road Type Rural Paved County Road No designation				U					all Occupants
Read Type Rural Paved Langth (miles): 2.0 Improvements Outlier Safety Susua & Systemic Ranking Review									
County Road No designation									0.000
Improve intersection Safety Improvements Impr									
Describe Current Safety Issues & Systemic Ranking Review Systemic Ranking Review	County Road I	vo designation	rumble matalled	1. 140					les to increase our vivability
North Dakota Crashes, 2008 - 2012 5 years							.0.0000.	Caloty	
North Dakota Crashes, 2008 - 2012 5 years	Describe Current Safety I	ssues & Systemic Rank	ing Review						
Total Road Dept K+A				5 years					
Density (per mile per year)	•			-		Rumeny		RINGGIOLIPG	CH2MHILL
Density (per mile per year) 0.30						Addit Street Host			
Rate (per MVM)				-					
ADT Range	, , ,								
ADT Range	Rate (per MVM)	1.80	0.00	0.00	•				
ADT Range									
ADT Range									
ADT Range		Value	Critical	Road					1
RO Density 0.000 0.032 Access Density 14.1 8.0	ADT Range					100	-	Binney II	
Curve Critical Radius Density Edge Risk 1 2 or 3	•					10000			
Edge Risk 1	Access Density	14.1	8.0	*					
Describe Proposed Safety Improvements Description Type	_			*		WGS RI			
Describe Proposed Safety Improvements	Edge Risk	1	2 or 3			N 48.0632467		-	CDE
Description Type Cost per mi Mileage Cost Notes - Curve and intersection projects suggested on other 4 Edge Lines Proactive \$400 0.0 \$0 Sheets.				***		W 98.901491	M-		SKE
Description Type Cost per mi Mileage Cost Notes - Curve and intersection projects suggested on other 4 Edge Lines Proactive \$400 0.0 \$0 Sheets.	Describe Proposed Safet	y Improvements							
4" Edge Lines	Describe i roposed Saret	y improvements							
4" Edge Lines		Description	Type	Cost per mi	Mileage	Cost	Notes .	- Curve and intersect	ion projects suggested on other
Content Line Rumble Strip	-						_		ion projects suggested on other
Edge Rumble Strip Ground In Wet-Reflective Markings Proactive \$3,500 2.0 \$7,000 0.0 \$0 Center Line Rumble Strip Proactive \$3,500 0.0 \$0 Center Line Proactive \$3,000 0.0 \$0 Project Cost Estimate (attach detailed copy) Proposed Year of Construction Proposed Year of Construction Proposed Year of Construction Proposed Year of Construction Proposed Year of Construction		· ·					00010		
Center Line Rumble Strip 6" Center Line Proactive Proactive \$3,000 0.0 \$0 Project Cost Estimate (attach detailed copy) Federal Funds \$6,300 Local Match (10% of Total project cost) \$700 Total Project Cost \$7,000 NDDOT Central Office Only Project Accepted?			Proactive	\$3,500	2.0	\$7,000			
Project Cost Estimate (attach detailed copy)	Ground	d In Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0			
Project Cost Estimate (attach detailed copy) Federal Funds \$6,300 Local Match (10% of Total project cost) \$700 Total Project Cost \$7,000 NDDOT Central Office Only Project Accepted? Yes No Reference Number ID Number Notes Page: 6 Segment ID: 508.01		•							
Federal Funds \$6,300 Local Match (10% of Total project cost) \$700 Total Project Cost \$7,000 **NDDOT Central Office Only** Project Accepted? Yes No Reference Number ID Number Notes Page: 6 Segment ID: 508.01	<u>-</u>	6" Center Line	Proactive	\$650	0.0	\$0	_		
Federal Funds \$6,300 Local Match (10% of Total project cost) \$700 Total Project Cost \$7,000 **NDDOT Central Office Only** Project Accepted? Yes No Reference Number ID Number Notes Page: 6 Segment ID: 508.01	Project Cost Estimate (at	took dotailed const			Dronos	ad Vaar	of Cana	truction	
Local Match (10% of Total project cost) \$700 Total Project Cost \$7,000 NDDOT Central Office Only	Project Cost Estimate (att	lacii delalled copy)			Fiopos	eu rear c	i Cons	SU UCUOII	
Local Match (10% of Total project cost) \$700 Total Project Cost \$7,000 NDDOT Central Office Only		Federal Funds	\$6.300						
Total Project Cost \$7,000 NDDOT Central Office Only Project Accepted?	Local Mato								
NDDOT Central Office Only Project Accepted?				_					
Project Accepted?		•	. ,						
Notes Page: 6 Segment ID: 508.01	NDDOT Central Office On	ly							
Page: 6 Segment ID: 508.01	Project Accepted?	Yes No	Reference Number				ID Nun	nber	
Segment ID: 508.01	Notes								
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Segment ID: 508.01									
Date: 10/24/2013								•	
								Date:	10/24/2013

Ramsey County Curves

									Crashes								
Curve Count	ID	Corridor	Segment Start	End	Curve Advisory Sign	Speed Advisory Sign	Chevrons	Total	Total Severe	к а	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Speed Limit	Risk Ranking	Notes
1	001A	1.01	Ramsey 1 Start of Ramsey 1	Intersection with ND 20	Yes	No	No		-		545	1791	Yes	Yes	High	***	
2	001B	1.01	Ramsey 1 Start of Ramsey 1	Intersection with ND 20	Yes	No	No	1	-		455	1791	Yes	Yes	High	**	
3	003A	3.01	Ramsey 3 Intersection with 48th Street	Intersection with ND 17	Yes	No	No	1	-		930	263	No	No	High	*	
4	003B	3.01	Ramsey 3 Intersection with 48th Street	Intersection with ND 17	Yes	No	No	-	-		965	263	Yes	Yes	High	***	
5	003C	3.02	Ramsey 3 Intersection with ND 17	Ramsey/Cavalier County Line	Yes	No	No	1	-		1120	222	Yes	Yes	High	***	
6	003D	3.02	Ramsey 3 Intersection with ND 17	Ramsey/Cavalier County Line	Yes	No	No	-	-		1055	222	Yes	Yes	High	***	
7	004A	4.01	Ramsey 4 Intersection with US 2	Intersection with 55th Street	Yes	No	No	-	-		1755	166	No	No	High		S-Curve
8	004B	4.01	Ramsey 4 Intersection with US 2	Intersection with 55th Street	Yes	No	No	-	-		850	166	No	No	High	*	S-Curve
9	004C	4.01	Ramsey 4 Intersection with US 2	Intersection with 55th Street	Yes	No	No	-	-		1175	166	No	No	High	*	S-Curve
10	004D	4.01	Ramsey 4 Intersection with US 2	Intersection with 55th Street	Yes	No	No	-	-		1460	166	No	No	High		S-Curve
11	004E	4.03	Ramsey 4 Intersection with 61st Street	Intersection with ND 17	Yes	Yes	No	-	-		1160	60	Yes	Yes	High	***	50 MPH
12	004F	4.03	Ramsey 4 Intersection with 61st Street	Intersection with ND 17	No	No	No	-	-		1105	60	Yes	Yes	High	***	
13	A800	8.02	Ramsey 8 Intersection with 91st Avenue (N)	Intersection with ND 1	Yes	Yes	No	-	-		550	89	Yes	Yes	High	***	50 MPH
14	008B	8.02	Ramsey 8 Intersection with 91st Avenue (N)	Intersection with ND 1	No	No	No	-	-		600	89	No	Yes	High	**	
15	008C	8.02	Ramsey 8 Intersection with 91st Avenue (N)	Intersection with ND 1	Yes	No	No	-	-		380	89	No	No	High		
16	008D	8.02	Ramsey 8 Intersection with 91st Avenue (N)	Intersection with ND 1	No	No	No	-	-		300	89	No	No	High		
17	505A	505.01	ods_Rutten Ri Ramsey/Benson County Line	Intersection with US 2	Yes	No	No	-	-		1065	530	Yes	Yes	High	****	
18	505B	505.01	ods_Rutten R Ramsey/Benson County Line	Intersection with US 2	Yes	No	No	-	-		660	530	No	No	High	**	
19	505C	505.01	ods Rutten R Ramsey/Benson County Line	Intersection with US 2	Yes	No	No	-	-		720	530	No	No	High	**	
20	507A	507.01	No designatior Intersection with US 2	Intersection with 48th Street	Yes	Yes	No		-		360	666	No	No	High		30 MPH
21	508A	508.01	No designatior End of road at lake	Intersection with ND 20	No	No	No	-	-		600	458	Yes	Yes	High	****	

	Т	otal
Stars	#	%
****	0	0%
****	2	9%
***	7	32%
**	4	18%
*	3	14%
	6	27%
	22	100%

Critical Ranges	Min	Max	
Radius	500	1,200	
ADT	350	650	

SFN 59959 (06-2		man(s)	Conta Email	cy Name: ict Name: Address:	es on Ram Ramsey Cou Kevin Fields hwydept@ste	inty end ellarnet.c	om		amsey 1 t	I	tion with NE ND DOT District ephone Number	: 3	i	
Location Des						ner describe	e your proje	.						
	tersect Lane 791 ural Pa				Sp Shou Shou Lenç	ane Width: peed Limit: lder Width: ulder Type: gth (miles): e Installed:	High 1' Paved 3.8				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olds Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints or Driver Safety dving dress Lane Depar ncy Medical Capab	for all Occupan	
				& System	ic Ranking Re	eview								
	K A	Rad	ius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
	0 0		45 55	1791 1791	Yes Yes	Yes Yes	***	- X	X -	Chevron Chevron	Inside/Outside Inside/Outside	Inside/Outside Inside/Outside	x x	40 35
Curve numbering Ranking Crite		onsecutiv	e, as so		Severe Crashes Radius 5	Criteria > 0 500 to 1200 350 to 650 Yes Yes	n further an	Curves are se	elected for projects s	et if:	vel road, etc			
Describe Prop	posed	l Safety	/ Impro	vements										
			Advanc	ee Warning S	Arrow E Sign/Speed Advis Shoulder Ru		Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per mile per mile	Quantity 2 0 2 .2 miles .2 miles	Total cost \$6,600 \$0 \$1,600 \$692 \$8,533 \$17,425	_Notes - Segmen suggested on oth		on projects
Project Cost I	Estim	ate (att	ach de	tailed co	py)					Proposed Ye	ear of Construct	ion		
				Local Matc	h (10% of Total p	leral Funds roject cost) ject Cost	\$1,742	-						
NDDOT Centr	ral Off	ice On	ly											
Project Accepted ^a Notes	?	Yes		No		Reference	Number				ID Number			
													Page Segment ID Date	

SFN 59959 (06-2	•	on mai	Age Con Ema	ncy Name tact Name il Address	Ramsey Cou : Ramsey Cou : Kevin Fields: : hwydept@stonal sheets to furti	inty end ellarnet.c	om		th 48th St	I	ersection wi ND DOT District ephone Number	: 3	i	
Location Des						ner describ	e your proje							
	nterse -Lane 63 tural F	ction v	vith 48th St vith ND 17	reet	Sj Shou Shou Leng	ane Width: peed Limit: lder Width: ulder Type: gth (miles): e Installed:	High 2' Paved 21.2				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olds Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depar ncy Medical Capab	for all Occupan	
				& Systen	nic Ranking Re									
	K	Α	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
	0	0	930 965	263 263	No Yes	No Yes	***		X X	Chevron Chevron	-	Inside/Outside Inside/Outside	X X	50 50
*Curve numberin Ranking Crite		conse	cutive, as s		Severe Crashes Radius 5	Criteria > 0 500 to 1200 350 to 650 Yes Yes		Curves are se	elected for proje s y or Existing Ch	ct if:	vel road, etc			
Describe Pro	pose	ed Sa	fety Imp	rovements										
			Adva	nce Warning	Arrow E Sign/Speed Advis Shoulder Ru		Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 2 0 2 3 miles 0 miles	Total cost \$6,600 \$0 \$1,600 \$978 \$0	_Notes - Segmen sheets.	t projects sugge	ested on other
Project Cost	Estir	mate	(attach c	letailed co	ру)					Proposed Ye	\$9,178 ear of Construct	ion		
		_		Local Mate	ch (10% of Total p	leral Funds roject cost) ject Cost	\$918	-						
NDDOT Cent	ral O	ffice	Only											
Project Accepted Notes	l?		Yes	□No		Reference	Number				ID Number			
													Page Segment ID Date	

North Dakota I SFN 59959 (06-						from I	nterse	ction wit	h ND 17 t	o Ramsey	/Cavalier Co	unty Line		
			Con Ema	tact Name	: Ramsey Cou : Kevin Fields : hwydept@st	end tellarnet.c					ND DOT District ephone Number			
Location De					onal sheets to furt	ther describ	e your proje	ect.						
Start: I	Interse Ramse 2-Lane 222 Rural F	ection ey/Cav	with ND 17 ralier Count		L S Shou Sho Len	Lane Width: Speed Limit: ulder Width: ulder Type: gth (miles): le Installed:	High 2' Paved 9.8				SHSP Empha: Reduce Alcohol Imp Increase the Use of Younger Driver/Old Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depar ncy Medical Capab	for all Occupar	
				s & Systen	nic Ranking R									
North Dakota Cr	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius		Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
003C 003D	0	0	1120 1055	222 222	Yes Yes	Yes Yes	*** ***	-	X X	Chevron Chevron	-	Inside/Outside Inside/Outside	X	50
Ranking Crit	teria	-		Inter	Severe Crashes Radius (ADT section on Curve Visual Trap	Criteria > 0 500 to 1200 350 to 650 Yes Yes		Curves are se	elected for proje rs ty or Existing Cl	ect if:	vel road, etc			
Describe Pro	opos	ed Sa	afety Imp	rovement	3									
			Adva	nce Warning	Arrow Sign/Speed Advis Shoulder Re	Board Only sory Plaque	Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 2 0 1 .6 miles	Total cost \$6,600 \$0 \$800 \$1,870 \$0 \$9,270	_Notes -		
Project Cost	t Esti	mate	(attach	detailed co	ру)					Proposed Y	ear of Construct	ion		
		-		Local Mat	ch (10% of Total p	deral Funds project cost) oject Cost	\$927	-						
NDDOT Cent	tral C	Office	Only											
Project Accepte	d?		☐Yes	No		Reference	Number				ID Number			
Notes	Cost Estimate (attach detai													
													Page Segment ID Date	

	6-2011)												
Diagna attach		,	Agend Conta Email	cy Name ct Name Address	: Ramsey Cou : Kevin Fields : hwydept@s	unty send tellarnet.c	om		ith US 2 to	I	tion with 55t ND DOT District: ephone Number:	: 3	5	
			(Corridor C		onal sheets to fur ng Curves)	iner describ	e your proje	ect.						
End Facility Type	: Inters : 2-Lar : 166 e Rural	ection e Paved	with US 2 with 55th Stree	et	Show Show Len	ane Width: speed Limit: ulder Width: ulder Type: gth (miles): le Installed:	High 1' Paved 13.0				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints or Driver Safety ving dress Lane Depa acy Medical Capal	for all Occupan	
				& Systen	nic Ranking R									
Curve ID	Crashe K 0	A 0	Radius (ft)	ADT 166	Intersection on Curve No	Visual Trap No	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project Inside/Outside	Shoulder Rumble Strip Project Inside/Outside	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
004B 004C 004D	0 0	0 0	850 1175 1460	166 166 166	No No No	No No No	* *	- - X	х х	Chevron Chevron	Inside/Outside Inside/Outside Inside/Outside	Inside/Outside Inside/Outside Inside/Outside	x - -	45 - -
Ranking Ci	riteria				Severe Crashes Radius	Criteria > 0 500 to 1200 350 to 650 Yes		- 3 or more ★	ty or Existing Ch					
					Visual Trap	Yes								
Describe P	ropos	sed S	afety Impro	vements	3									
			Advance	e Warning	Arrow Sign/Speed Advis Shoulder R	Board Only	Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per mile per mile	Quantity 2 0 1 .5 miles .5 miles	Total cost \$6,600 \$0 \$800 \$1,607 \$19,818 \$28,825	Notes - Segmen suggested on ot		on projects
Project Co	st Est	timate	e (attach de	tailed co	ру)					Proposed Ye	ear of Construct	ion		
				Local Mate	ch (10% of Total p	deral Funds project cost) pject Cost	\$2,882	-						
	ntral	Offic												
NDDOT Ce														
NDDOT Ce Project Accep Notes			Yes	No		Reference	e Number				ID Number			

SFN 59959 (06	,		Ag Cor Ema	ency Name ntact Name ail Address	n Ramsey 6: Ramsey Cou : Kevin Fields : hwydept@st onal sheets to furt	unty send tellarnet.c	com		th 61st St		ersection wi ND DOT District ephone Number	: 3	·	
Location De						iner describ	e your proje	ect.						
	Interse 2-Lane 60 Rural	ection e Paved	with 61st S with ND 17		S Shou Sho Len	ane Width: peed Limit: ulder Width: ulder Type: gth (miles): le Installed:	High 2' Paved 8.7				SHSP Empha: Reduce Alcohol Imp Increase the Use of Younger Driver/Old Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving ddress Lane Depar ncy Medical Capab	for all Occupan	
				es & Systen	nic Ranking R									
North Dakota C Curve ID	K	A	Radius (ft		Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
004E 004F	0	0	1160 1105	60 60	Yes Yes	Yes Yes	*** ***	-	x x	Chevron Chevron	- -	Inside/Outside Inside/Outside	-	-
'Curve numberi Ranking Cri		conse	ecutive, as		Severe Crashes Radius	Criteria > 0 500 to 1200 350 to 650 Yes Yes		Curves are se	elected for proje s sy or Existing Ch	ct if:	vel road, etc			
Describe Pr	opos	ed Sa	afety Imp	provement	S									
			Adva	ance Warning	Arrow Sign/Speed Advis Shoulder Re	Board Only sory Plaque	Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 2 0 0 .6 miles .0 miles	Total cost \$6,600 \$0 \$0 \$1,937 \$0 \$8,537	_ Notes -		
Project Cos	t Esti	mate	(attach	detailed co	ру)					Proposed You	ear of Construct	tion		
		-		Local Mat	ch (10% of Total p	deral Funds project cost) pject Cost	\$854	_						
NDDOT Cen	itral (Office	Only											
Project Accepte			Yes	□No		Reference	e Number				ID Number			
Notes													Page	v 5
													Segment ID	

			Curve											
			Agend Conta	cy Name ct Name	₹amsey & 1 : Ramsey Cou : Kevin Fields : hwydept@si	unty end		tion with	91st Ave	, ,	Intersection ND DOT District ephone Number	: 3		
			ap(s). You may (Corridor C		onal sheets to fur	ther describ	e your proje	ect.						
Start:	: Inters : Inters : 2-Lar : 89 e Rural	section section ne Paved	with 91st Aver with ND 1		L S Shou Sho Len	Lane Width: Speed Limit: ulder Width: ulder Type: gth (miles): le Installed:	High 2' Paved 14.3				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depa ncy Medical Capal	for all Occupar	
				& Systen	nic Ranking R									
North Dakota (K	Α	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	
008A 008B 008C 008D	0 0 0	0 0 0 0	550 600 380 300	89 89 89 89	Yes No No No	Yes Yes No No	***	- - X X	x x -	Chevron Chevron Chevron Chevron	- - - -	Inside/Outside Inside/Outside Inside/Outside Inside/Outside	x x x x	40 40 35 35
Ranking Cr					Severe Crashes Radius	Criteria > 0 500 to 1200 350 to 650 Yes		Curves are se	elected for projects s ty or Existing Ch	et if:				
					Visual Trap	Yes								
Describe P	ropos	sed S	afety Impro	vements										
			Advanc	e Warning	Arrow Sign/Speed Advis Shoulder R	Board Only	Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 4 0 4 .4 miles .0 miles	Total cost \$13,200 \$0 \$3,200 \$1,108 \$0 \$17,508	Notes - Intersect sheets.	tion projects su	ggested on other
Project Co	st Est	timate	e (attach de	tailed co	ру)					Proposed Yo	ear of Construct	ion		
				Local Mate	ch (10% of Total p	deral Funds project cost) pject Cost	\$1,751	-						
NDDOT Ce		Office												
Project Accept Notes	ted?		Yes	No		Reference	e Number	<u> </u>			ID Number	1		

			Y IMPROV		PROGRAM Iramming	(HSIP)	PROJE	CT APPLI	CATION					
SFN 59959 (0	6-2011)	Curves of Agend Conta	on Woo cy Name: ct Name: Address:	ds_Rutter Ramsey Cou Kevin Fields hwydept@st	inty end ellarnet.c	om	·	Benson C	-	e to Intersec ND DOT District ephone Number	: 3		
			ap(s). You may (Corridor C		nal sheets to furt	her describ	e your proje	ect.						
Start	Rams Inters 2-Lar 530 Rural	sey/Be section ne Paved	nson County L with US 2		L Sp Shou Shot Lenç	ane Width: peed Limit: lder Width: ulder Type: gth (miles): e Installed:	High 2' Paved 3.3				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depa ncy Medical Capal	for all Occupan	
				& System	ic Ranking Re									
North Dakota	K	es, 200 A	08 - 2012 Radius (ft)	ADT	Intersection on Curve	5 Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
505A 505B 505C	0 0 0	0 0 0	1065 660 720	530 530 530	Yes No No	Yes No No	****	X X	x x x	Chevron Chevron Chevron	- - -	Inside/Outside Inside/Outside Inside/Outside	x x x	50 40 45
*Curve numbe Ranking C i			secutive, as sor	ζ	Severe Crashes Radius 5	Criteria > 0 500 to 1200 350 to 650 Yes Yes		Curves are se	elected for projects s ty or Existing Ch	et if:	vel road, etc			
Describe P	ropos	sed S	afety Impro	vements										
			Advanc	e Warning S	Arrow E Sign/Speed Advis Shoulder Ru	Board Only ory Plaque	Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 3 0 3 .4 miles .0 miles	Total cost \$9,900 \$0 \$2,400 \$1,121 \$0 \$13,421	_Notes - Intersec sheets.	tion projects su	ggested on other
Project Co	st Est	timat	e (attach de	tailed cop	oy)					Proposed Yo	ear of Construct	ion		
				Local Match	Fed n (10% of Total p Total Pro		\$1,342	-						
NDDOT Ce Project Accept Notes		Offic	e Only	No		Reference	e Number				ID Number			
													Page Segment ID Date	

HIGHWAY SAFE	TY IMPR	OVEMEN	Γ PROGRAM	(HSIP)	PROJE	CT APPLI	CATION					
North Dakota Departm SFN 59959 (06-2011)		sportation Pro	gramming									
	Co Em	jency Name ntact Name ail Address	e: Ramsey Cou e: Kevin Fieldse e: hwydept@ste	nty end ellarnet.c	om		road at la		Section with ND DOT District ephone Number	: 3	5	
Please attach a location Location Description				ner describe	e your proje	ect.						
Start: End of ro End: Intersecti Facility Type: 2-Lane ADT: 458 Road Type Rural Par County Road No desig	ad at lake on with ND 2		La Sp Should Shou Leng	ane Width: beed Limit: der Width: alder Type: th (miles): e Installed:	High 2' Paved 2.0				SHSP Empha: Reduce Alcohol Imp Increase the Use of Younger Driver/Olds Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving ddress Lane Depa ncy Medical Capal	for all Occupar	
Describe Current S North Dakota Crashes, 2		es & Syster	nic Ranking Re									
Curve ID K A		t) ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
508A 0 0	600	458	Yes	Yes	****	-	Х	Chevron	-	Inside/Outside	Х	40
*Curve numbering not co Ranking Criteria		Inter	Severe Crashes Radius 5 ADT 3 section on Curve Visual Trap	moved from Criteria		Curves are se	elected for proje rs ty or Existing Ch	ect if:	vel road, etc			
			D	Description	Type	Unit Cost		Quantity	Total cost	Notes - Segmen	t and intersecti	on projects
	Adv	ance Warning	Arrow B Sign/Speed Adviso Shoulder Ru	Chevrons Board Only ory Plaque	Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	1 0 1 .2 miles .0 miles	\$3,300 \$0 \$800 \$566 \$0 \$4,666	suggested on ot		, ,,,,,,,
Project Cost Estima	ate (attach	detailed co	ору)					Proposed Y	ear of Construct	tion		
		Local Mat	Fede ch (10% of Total pro Total Proj		\$467	-						
NDDOT Central Off												
Project Accepted? Notes	Yes	□No	T	Reference	Number				ID Number			
											Page Segment ID Date	

Ramsey County Summary of Rural Intersection Projects

				Directional	Mainline Dynamic Warning		Signs &	
Page	Intersection ID	Description	Risk Ranking	Median	Sign	Install Street Lights	Markings	Project Cost (\$)
1	508.01	45th St NE (Ramsey 508) & ND 20	*****	-	x	x	x	\$59,000
2	505.01	44th St NE & 89th Ave NE (Ramsey 505)	****	-	-	-	Х	\$1,850
3	1.01	47th St NE/County Highway 1 (Ramsey 1) & ND 20	****	-	Х	-	Х	\$53,700
4	7.01	55th St NE (Ramsey 7) & ND 1	****	-	-	X	Х	\$9,000
5	8.02	Main St/105th Ave NE (Ramsey 8) & ND 1	***	-	-	X	Х	\$9,000
6	500.01	100th Ave & US 2 (E)	***	-	-	Х	Х	\$8,300
7	507.01	83rd Ave NE (Ramsey 507) & US 2	***	Х	-	X	Х	\$759,250
8	8.01	60th St NE (Ramsey 8) & 81st Ave NE/ND 20	***	-	-	X	Х	\$9,700
9	501.01	100th Ave & US 2 (W)	***	-	-	X	X	\$7,850
10	2.01	48th St NE (Ramsey 2) & 83rd Ave NE (Ramsey 507)	**	-	Х	X	Х	\$59,000
11	506.01	49th St NE & 72nd Ave NE (Ramsey 506)	**	-	-	-	Х	\$3,000
12		US 2 & 96th Ave NE (Ramsey 4)	**	-	-	Х	-	\$9,000
13	504.01	44th St NE & 92nd Ave NE (Ramsey 504)	**	-	-	Х	-	\$9,250
14	2.02	48th St NE (Ramsey 2) & 91st Ave NE (Ramsey 3)	**	-	-	Х	-	\$7,850
				1	3	11	11	\$1,005,750

Ramsey County Rural Intersection Listing

Int #	Intersection Description	Skew	On/Near Curve	Development	RR Xing	ADT	Previous STOP (>5mi)	Total Crashes	ADT Cross Product >100,000	Cr	ash Cost
1.01	47th St NE/County Highway 1 (Ramsey 1) & ND 20	No	Yes	No	No	8282	Yes	5	Yes	\$	263,000
2.01	48th St NE (Ramsey 2) & 83rd Ave NE (Ramsey 507)	No	No	No	No	1280	No	1	Yes	\$	12,000
2.02	48th St NE (Ramsey 2) & 91st Ave NE (Ramsey 3)	No	No	No	No	540	Yes	0	Yes	\$	-
2.03	48th St NE (Ramsey 2) & 92nd Ave NE (Ramsey 504)	No	No	No	No	337	No	0	No	\$	-
2.04	48th St NE (Ramsey 2) & 96th Ave NE (Ramsey 4)	No	No	No	No	240	Yes	0	No	\$	-
3.01	60th St NE (Ramsey 8) & 91st Ave NE (Ramsey 3)	No	No	No	No	307	Yes	0	No	\$	-
3.02	61st St NE (Ramsey 8) & 91st Ave NE (Ramsey 3)	No	No	No	No	267	Yes	0	No	\$	-
3.03	69th St NE/ND 17 & 92nd Ave NE (Ramsey 3)	No	No	No	No	443	Yes	0	No	\$	-
3.04	74th St NE (Ramsey 9) & 92nd Ave NE (Ramsey 3)	No	No	No	No	335	Yes	0	No	\$	-
4.01	US 2 & 96th Ave NE (Ramsey 4)	No	No	No	No	1928	Yes	0	Yes	\$	-
4.02	51st St NE (Ramsey 6) & 96th Ave NE (Ramsey 4)	No	No	No	No	183	Yes	0	No	\$	-
4.03	55th St NE (Ramsey 7) & 96th Ave NE (Ramsey 4)	No	No	No	No	250	Yes	0	No	\$	-
4.04	61st St NE (Ramsey 8) & 96th Ave NE (Ramsey 4)	No	No	No	No	110	No	0	No	\$	-
4.05	61st St NE (Ramsey 8) & 97th Ave NE (Ramsey 4)	No	No	No	No	127	No	0	No	\$	-
4.06	69th St NE/ND 17 & 99th Ave NE (Ramsey 4)	No	No	No	No	433	Yes	0	No	\$	-
4.07	74th St NE (Ramsey 9) & 99th Ave NE (Ramsey 4)	No	No	No	No	170	Yes	0	No	\$	-
7.01	55th St NE (Ramsey 7) & ND 1	Yes	Yes	Yes	No	728	Yes	0	No	\$	-
7.02	57th St NE (Ramsey 7) & ND 1	No	No	No	No	293	Yes	0	No	\$	-
8.01	60th St NE (Ramsey 8) & 81st Ave NE/ND 20	No	No	Yes	No	1267	Yes	0	Yes	\$	-
8.02	Main St/105th Ave NE (Ramsey 8) & ND 1	Yes	Yes	Yes	No	640	Yes	0	No	\$	-
9.01	74th St NE (Ramsey 9) & 82nd Ave NE/ND 17	No	No	No	No	435	Yes	0	No	\$	-
9.02	74th St NE (Ramsey 9) & 105th Ave NE/ND 1	No	No	No	No	558	Yes	0	No	\$	-
10.03	` , ,	No	No	No	No	1223	Yes	0	No	\$	-
500.01	100th Ave & US 2 (E)	Yes	Yes	No	No	2445	Yes	0	Yes	\$	-
	100th Ave & 100th Ave	Yes	Yes	No	No	235	Yes	0	No	\$	-
501.01	100th Ave & US 2 (W)	No	Yes	No	No	2340	Yes	0	Yes	\$	-
502.01	42nd St NE (Ramsey 502) & 97th Ave NE (Ramsey 503)	No	No	No	No	300	No	0	No	\$	-
	2 42nd St NE (Ramsey 502) & 96th Ave NE	No	No	No	No	240	No	0	No	\$	-
	44th St NE & 97th Ave NE (Ramsey 503)	No	No	No	No	1945	No	0	Yes	\$	-
	44th St NE & 92nd Ave NE (Ramsey 504)	No	No	No	No	2308	Yes	0	Yes	\$	-
	44th St NE & 89th Ave NE (Ramsey 505)	Yes	Yes	Yes	No	345	Yes	1	No	\$	136,000
	49th St NE & 72nd Ave NE (Ramsey 506)	No	No	No	No	945	Yes	1	No	\$	12,000
	83rd Ave NE (Ramsey 507) & US 2	No	Yes	No	No	3315	No	2	Yes	\$	148,000
	45th St NE (Ramsey 508) & ND 20	Yes	Yes	Yes	No	4952	Yes	2	Yes	\$	24,00

Ramsey County Rural Intersection Prioritization

Rank	Int #	Intersection Description	Skew	On/Near Curve	Development RR Xin	Previous g STOP (>5mi)	Total Crashes	ADT Cross Product >100,000	Priority	Cra	ash Cost
1	508	45th St NE (Ramsey 508) & ND 20	*	*	*	*	*	*	*****	\$	24,000
2	505	44th St NE & 89th Ave NE (Ramsey 505)	*	*	*	*	*		****		136,000
3	1.01	47th St NE/County Highway 1 (Ramsey 1) & ND 20		*		*	*	*	****		263,000
4	7.01	55th St NE (Ramsey 7) & ND 1	*	*	*	*			****	\$	-
5	8.02	Main St/105th Ave NE (Ramsey 8) & ND 1	*	*	*	*			****	\$	-
6	500	100th Ave & US 2 (E)	*	*		*		*	****	\$	-
7	507.01	83rd Ave NE (Ramsey 507) & US 2		*			*	*	***		148,000
8	8.01	60th St NE (Ramsey 8) & 81st Ave NE/ND 20			*	*		*	***	\$	-
9*	500	100th Ave & 100th Ave	*	*		*			***	\$	-
10	501	100th Ave & US 2 (W)		*		*		*	***	\$	-
11	2.01	48th St NE (Ramsey 2) & 83rd Ave NE (Ramsey 507)					*	*	**	\$	12,000
12	506	49th St NE & 72nd Ave NE (Ramsey 506)				*	*		**	\$	12,000
13	4.01	US 2 & 96th Ave NE (Ramsey 4)				*		*	**	\$	-
14	504	44th St NE & 92nd Ave NE (Ramsey 504)				*		*	**	\$	-
15	2.02	48th St NE (Ramsey 2) & 91st Ave NE (Ramsey 3)				*		*	**	\$	-
16	2.04	48th St NE (Ramsey 2) & 96th Ave NE (Ramsey 4)				*			*	\$	-
17	3.01	60th St NE (Ramsey 8) & 91st Ave NE (Ramsey 3)				*			*	\$	-
18	3.02	61st St NE (Ramsey 8) & 91st Ave NE (Ramsey 3)				*			*	\$	-
19	3.03	69th St NE/ND 17 & 92nd Ave NE (Ramsey 3)				*			*	\$	-
20	3.04	74th St NE (Ramsey 9) & 92nd Ave NE (Ramsey 3)				*			*	\$	-
21	4.02	51st St NE (Ramsey 6) & 96th Ave NE (Ramsey 4)				*			*	\$	-
22	4.03	55th St NE (Ramsey 7) & 96th Ave NE (Ramsey 4)				*			*	\$	-
23	4.06	69th St NE/ND 17 & 99th Ave NE (Ramsey 4)				*			*	\$	-
24	4.07	74th St NE (Ramsey 9) & 99th Ave NE (Ramsey 4)				*			*	\$	-
25	7.02	57th St NE (Ramsey 7) & ND 1				*			*	\$	-
26	9.01	74th St NE (Ramsey 9) & 82nd Ave NE/ND 17				*			*	\$	-
27	9.02	74th St NE (Ramsey 9) & 105th Ave NE/ND 1				*			*	\$	-
28	10.03	65th St NE (Ramsey 10) & 81st Ave NE/ND 20				*			*	\$	-
29	503	44th St NE & 97th Ave NE (Ramsey 503)						*	*	\$	-
30	2.03	48th St NE (Ramsey 2) & 92nd Ave NE (Ramsey 504)								\$	-
31	4.04	61st St NE (Ramsey 8) & 96th Ave NE (Ramsey 4)								\$	-
32	4.05	61st St NE (Ramsey 8) & 97th Ave NE (Ramsey 4)								\$	-
33	502	42nd St NE (Ramsey 502) & 97th Ave NE (Ramsey 503)								\$	-
34	502.02	42nd St NE (Ramsey 502) & 96th Ave NE								\$	-

			(,								
			Total Stars	6	9	5	0	26	6	11	
Totals			% That Gets Star	18%	26%	15%	0%	76%	18%	32%	
	#	%	_								
*****	0	0%		Stars							
*****	1	3%	Skew -	If inters	section is s	kewed at an	angle of 20	degrees or	greater.		
****	1	3%	On/Near Curve -	If inters	section is o	n or within 1	,000 feet of	curve.			
****	4	12%	Development -	If inters	section aer	ial shows a c	commercial	developmen	t with acces	s near inter	section.
***	4	12%	RR Xing -	If inters	section has	a railroad ci	rossing on a	any approach	n within 500	feet.	
**	5	15%	Previous STOP (>5 mi) -	If vehic	cles approa	ching the sto	op control h	ave not had	a previous s	stop along th	ne roadway within 5 mile
*	14	41%	Total Crashes -	If inters	section has	at least 1 cr	ash.				
-	5	15%	ADT Cross Product -	If inters	section has	an ADT cro	ss product :	>100,000			
	3/1	100%		•							

UIOLINAN OA EETV III	IDD OVE	HENT DDGGD4	M (1015) 556 11		2471211		
HIGHWAY SAFETY IM North Dakota Department of 1			M (HSIP) PROJI	ECT APPLIC	CATION		
SFN 59959 (06-2011)							
	_		St NE (Ramse			_	
Agency Name: Contact Name:					DOT District: one Number:		15
•••••••		@stellarnet.com		relepii	one Number.	701-002-70	13
Please attach a location map(s).			urther describe your pro	oject			
Location Description							
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Ramsey	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT: Major Leg:	No No 4555 397		Reduce Alcohol Increase the Use Younger Driver/ Curb Aggressive Improvements to	Impaired Driving of Safety Re Older Driver Se Driving of Address Langency Medica	straints for all Occupants
Describe Current Safety I	ssues & 3	Systemic Ranking	Review				
North Dakota Crashes, 2008 - 20)12	5	years				
	Total	Angle	K+A			2 100	A CONTRACTOR
Crashes		1	0.00				
Rate (per MVM)	0.2	0.1	0.0	//		> / //	
							(1 . W
		0 ''' 1	D: 1 D 1:	9	743		
Skew	Value Yes	Critical Yes	Risk Ranking ★	_			2
On/Near Curve		Yes	*		37/		
Development		Yes	*	- 1			
Near RR Crossing Distance from previous STOP		Yes Yes	*	8	/ 1		
Volume Cross Product	Yes	≥ 100,000	*	8		148	
Total Crashes	2	>0	*	_	3/1		
Describe Proposed Safet	y Improve	ements					
	Description	Unit Cost		Units	Cost	Notes -	Segment and curve projects
R	Roundabout	+ //	per intersection	0	\$0.00		suggested on other sheets.
Directio Mainline Dynamic Wa	nal Median	. ,	per intersection per intersection	0 1	\$0.00 \$50,000.00		
	ose Median		per intersection	0	\$0.00		
Installing S	treet Lights e Stop Sign		per street light per sign	1 2	\$6,000.00 \$700.00		
Upgrade Ju			per sign	2	\$700.00		
Upgrade Stop A	Ahead Sign	\$450	per sign	2	\$900.00		
Upgrade Stop Ahe	de Stop Bar		per marking per marking	1 1	\$450.00 \$250.00		
Review Sign	•	•	per intersection	0	\$0.00		
Signs and Markings and Street L	ight project	costs vary by the numb	er of minor legs associa	ated with the inter	\$59,000.00		
Project Cost Estimate (at			er or minor legs associa		Year of Const	truction	
		450.400					
Local Match (10% of Total p	deral Funds project cost)	\$53,100 \$5,900					
	ject Cost		-				
NDDOT Control Office On	1.						
NDDOT Central Office On Project Accepted?		□No	Reference Number		T	ID Number	T
Notes			11010101100 110111001				
						Into	Page: 1 ersection ID: 508.01
						inte	Date: 10/24/2013

HIGHWAY SAFETY IM North Dakota Department of 1			M (HSIP) PROJI	ECT APPLIC	CATION		
SFN 59959 (06-2011)	папэропа						
		44th St	NE & 89th Ave	e NE (Ram	sey 505)		
Agency Name:					DOT District:	. •	
Contact Name:				Teleph	one Number:	701-662-70	15
Please attach a location map(s).		@stellarnet.com	urther describe your pro	iect			
Location Description	Tou may us	Je additional sheets to h	artifer describe your pro	jeot			
<i>p</i>				T			neck all that apply)
Configurations	_	Troffic Control Davison	Thru Cton			ol Impaired Drivi	
Configuration: Configuration (2):		Traffic Control Device: Street Lights:	•			se of Safety Re r/Older Driver S	straints for all Occupants afety
Urban/Rural:		Flashers:	No		Curb Aggressiv		
-	Ramsey	Major Entering ADT:			•		e Departure Crashes
Entering ADT:	345	Minor Entering ADT: Major Leg:			Improve Inters		al Capabilities to Increase Survivabilit
				_	provo ii itoro		
Describe Current Safety I North Dakota Crashes, 2008 - 20	ssues & S						
North Dakota Crasnes, 2008 - 20	J12	5	years				
	Total	Angle	K+A		E DAM S		The same of
Crashes	1 1.6	1 1.6	0.00 0.0		The state of the s		
Rate (per MVM)	1.0	1.0	0.0	-			
					46.6		
Skew	Value Yes	Critical Yes	Risk Ranking ★	_			
On/Near Curve		Yes	*		1		
Development		Yes	*		2	Samp Co.	AND THE PERSON TO
Near RR Crossing		Yes		-	I		
Distance from previous STOP Volume Cross Product		Yes ≥ 100,000	*		1000		1000000000000000000000000000000000000
Total Crashes		>0	*				Contract of the Contract of th
			****	_	3 .	104 1 102	CTESTED AND A
Describe Proposed Safet	v Improve	ements					
	, ,						
	Description			Units	Cost	Notes -	Curve projects suggested on other
	Roundabout onal Median	+ ,,	per intersection per intersection	0	\$0.00 \$0.00		sheets.
Mainline Dynamic Wa		. ,	per intersection	0	\$0.00		
	ose Median		per intersection	0	\$0.00		
Installing S	treet Lights e Stop Sign		per street light per sign	0 1	\$0.00 \$350.00		
Upgrade Ju			per sign	1	\$350.00		
Upgrade Stop A	Ahead Sign	\$450	per sign	1	\$450.00		
Upgrade Stop Ahe	J	•	per marking	1	\$450.00		
Upgrad Review Sign	de Stop Bar	•	per marking per intersection	1 0	\$250.00 \$0.00		
Roview Sign	io and con	Ψ2,100	por intoroccion		\$1,850.00	=	
Signs and Markings and Street L			er of minor legs associa				
Project Cost Estimate (at	tacn deta	пеа сору)		Proposea	Year of Cons	struction	
Fed	deral Funds	\$1,665					
Local Match (10% of Total p		\$185	_				
l otal Pro	ject Cost	\$1,850					
NDDOT Central Office On	ıly						
Project Accepted?	Yes	□No	Reference Number			ID Number	
Notes							
							Domes 2
						Into	Page: 2 ersection ID: 505.01
						iiile	Date: 10/24/2013

HIGHWAY SAFETY IM	PROVE	MENT PROGRA	M (HSIP) PRO II	FCT APPLIC	CATION	
North Dakota Department of T SFN 59959 (06-2011)		ion Programming				
		47th St NE/C	ounty Highwa	y 1 (Rams	ey 1) & ND	20
Agency Name: I	Ramsey (County		ND I	DOT District:	3
Contact Name: I				Telepho	one Number:	701-662-7015
Email Address: I	hwydept (@stellarnet.com				
Please attach a location map(s).	You may us	e additional sheets to f	urther describe your pro	oject		
Location Description						
Configuration:) Configuration (2): I Urban/Rural: I County: I Entering ADT: 8	Jndivided Rural Ramsey	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT: Major Leg:	Yes No 7048 1235		Reduce Alcohol Increase the Use Younger Driver/C Curb Aggressive Improvements to	o Address Lane Departure Crashes rgency Medical Capabilities to Increase Survivability
Describe Current Safety Is	sues & S	Systemic Ranking	Review			
North Dakota Crashes, 2008 - 20	12	•	years			
		_				
	Total	Angle	K+A		- Bally	
Crashes Rate (per MVM)	5 0.3	0 0.0	0.00 0.0			
Nate (per wiviw)	0.3	0.0	0.0	_		
				1		
					£ .	
	Value	Critical	Risk Ranking		1 10 1	
Skew	No	Yes			1-	
On/Near Curve	Yes	Yes	*	8		
Development	No	Yes		-1		
Near RR Crossing Distance from previous STOP	No Yes	Yes	_	-	75	
Volume Cross Product	Yes	Yes ≥ 100,000			The second	911
Total Crashes	5	>0	*	la de	To House	
1 01441 01461100			***		200	
Describe Proposed Safety	<i>Improve</i>	ements				
_		11.70		11.5		Notes Occupated and company and
	Description Dundabout	Unit Cost	nor interception	Units	Cost	Notes - Segment and curve projects
	nal Median		per intersection per intersection	0 0	\$0.00 \$0.00	suggested on other sheets.
Mainline Dynamic Wa			per intersection	1	\$50,000.00	
-	se Median		per intersection	0	\$0.00	
Installing St	reet Lights	\$6,000	per street light	Installed	\$0.00	
. 0	Stop Sign		per sign	2	\$700.00	
Upgrade Jun			per sign	2	\$700.00	
Upgrade Stop A Upgrade Stop Ahea		•	per sign per marking	2 2	\$900.00 \$900.00	
1 0	e Stop Bar		per marking	2	\$500.00	
Review Signs	•		per intersection	0	\$0.00	
					\$53,700.00	
Signs and Markings and Street Li	ght project	costs vary by the numb	er of minor legs associa			
Project Cost Estimate (att	ach detai	iled copy)		Proposed	Year of Const	ruction
Fode	eral Funds	\$48,330				
Local Match (10% of Total pr		\$5,370				
Total Proj		\$53,700	=			
]		+30,.00				
NDDOT Central Office Onl	'y					
		□No	Reference Number			ID Number
Notes				·	•	·
						Page: 3
						Intersection ID: 1.01
						Date: 10/24/2013

UIGUNAY OA FETY IMPRO	WENE DOOD	M (UOID) DDO IE	OT 400110	ATION		
HIGHWAY SAFETY IMPRO North Dakota Department of Trans		AM (HSIP) PROJE	CI APPLIC	CATION		
SFN 59959 (06-2011)	·					
		th St NE (Rams	• ,			
Agency Name: Ram	-			DOT District:	-	_
Contact Name: Kevi			Telepho	one Number:	701-662-7015	
Please attach a location map(s). You n	dept@stellarnet.com	further describe your proje	ect			
Location Description	iay acc additional checto to	rankiner accounce your proj				
Configuration: X Configuration (2): Undiv Urban/Rural: Rural County: Rams	Flashers	s: No s: No		Reduce Alcohol Increase the Us Younger Driver/ Curb Aggressive	e of Safety Rest Older Driver Saf e Driving	g raints for all Occupants
Entering ADT: 728	Minor Entering ADT Major Leç	T: 128		•	rgency Medical (Capabilities to Increase Survivability
Describe Current Safety Issue	s & Systemic Ranking	ı Review				
North Dakota Crashes, 2008 - 2012		5 years				
To	tal Angla	ΚιΛ	_			
To Crashes 0		0.00	_		10-11	TO THE REAL PROPERTY.
Rate (per MVM) 0.	.0 0.0	0.0	_			The state of the s
						3
Val		Risk Ranking		是一直也	12/19	
Skew Ye		*		14 016	CHEST TO SERVICE	COMPANY OF THE PARTY OF THE PAR
On/Near Curve Ye Development Ye		* *		4	10,6	The same
Near RR Crossing N					F. Alan	
Distance from previous STOP Yes		*	2	A STATE OF THE PARTY OF THE PAR	(A)	
Volume Cross Product N Total Crashes 0	lo ≥ 100,000) >0		20	A. C. C.		
2.00		****		1		
Describe Proposed Safety Imp	provements					
Describe i roposed Sarety imp	novements					
Descri			Units	Cost	Notes -	
Rounda Directional Mo	* ,,	per intersection per intersection	0 0	\$0.00 \$0.00		
Mainline Dynamic Warning		per intersection	0	\$0.00		
Close Mo Installing Street L		per intersection	0 1	\$0.00 \$6,000.00		
Upgrade Stop) per street light) per sign	2	\$700.00		
Upgrade Junction		per sign	2	\$700.00		
Upgrade Stop Ahead Upgrade Stop Ahead Ma) per sign) per marking	2 1	\$900.00 \$450.00		
Upgrade Stop Affead Ma		per marking	1	\$250.00		
Review Signs and	•	per intersection	0	\$0.00		
Signs and Markings and Street Light p	roject costs vary by the num	her of minor leas associat	ted with the inter	\$9,000.00		
Project Cost Estimate (attach		ber of fillifor legs associate		Year of Const	truction	
Federal F Local Match (10% of Total project						
Total Project (_				
NDDOT Central Office Only		Defense as North as	1		ID November	
Project Accepted?	. □ No	Reference Number			ID Number	
						Page: 4
					Inters	ection ID: 7.01 Date: 10/24/2013

HIGHWAY SAFETY IMI	DDOVEN	IENT DDOGDA	M (HSID) DDO II	ECT ADDI IC	NOITA	
North Dakota Department of To SFN 59959 (06-2011)			ivi (HSIP) PROJI	ECT APPLIC	ATION	
		Main St/	105th Ave NE	(Ramsey 8	3) & ND 1	
Agency Name: F	Ramsey C			`	OOT District:	3
Contact Name: I				Telepho	one Number:	701-662-7015
Email Address: h						
Please attach a location map(s).	∕ou may use	additional sheets to f	urther describe your pro	ject		
Location Description						
Configuration:) Configuration (2): Urban/Rural: F County: F Entering ADT: 6	Jndivided Rural Ramsey	Fraffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT: Major Leg	No No 498 143		Reduce Alcoho Increase the Us Younger Driver Curb Aggressiv Improvements	to Address Lane Departure Crashes ergency Medical Capabilities to Increase Survivability
Describe Current Safety Is	sues & S	ystemic Ranking	Review			
North Dakota Crashes, 2008 - 20	12		years			
	-		14. A			
Crashes	Total 0	Angle 0	0.00	_		
Rate (per MVM)	0.0	0.0	0.00	2		
rate (per in rin)	0.0	0.0	0.0			THE STATE OF THE S
				4		
					1000年960	
	Value	Critical	Risk Ranking			
Skew	Yes	Yes	*	VI.		17 5 10
On/Near Curve	Yes	Yes	*	100		ALL STATE OF THE S
Development	Yes No	Yes	*	-		
Near RR Crossing Distance from previous STOP	Yes	Yes Yes	*		Steel House of the last	The second secon
Volume Cross Product	No	≥ 100,000			Ville -	
Total Crashes	0	>0				A RIVER TO SERVICE TO
			***		1000	
Describe Proposed Safety	Improver	nents				
		Unit Coot		Llaita	Cont	Notes Curve projects suggested on other
	escription oundabout	Unit Cost \$1,000,000	per intersection	Units 0	Cost \$0.00	Notes - Curve projects suggested on other sheets.
	nal Median		per intersection	0	\$0.00	Silects.
Mainline Dynamic Wa			per intersection	0	\$0.00	
	se Median	\$25,000	per intersection	0	\$0.00	
Installing Str			per street light	1	\$6,000.00	
	Stop Sign		per sign	2	\$700.00	
Upgrade Jun			per sign per sign	2 2	\$700.00	
Upgrade Stop A Upgrade Stop Ahea		•	per sign per marking	1	\$900.00 \$450.00	
	Stop Bar		per marking	1	\$250.00	
Review Signs			per intersection	0	\$0.00	
					\$9,000.00	
Signs and Markings and Street Lig	ght project co	osts vary by the numb	er of minor legs associa			
Project Cost Estimate (atta	ach detail	ed copy)		Proposed	Year of Cons	truction
Fodo	eral Funds	\$8,100				
Local Match (10% of Total pro		\$900				
Total Proj		\$9,000	_			
,		*-,				
NDDOT Central Office Onl	y					
Project Accepted?	Yes	No	Reference Number			ID Number
Notes				<u></u>		
						Page: 5
						Intersection ID: 8.02
						Date: 10/24/2013

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HIGHWAY SAFETY IMINorth Dakota Department of Tr			M (HSIP) PROJI	ECT APPLIC	CATION		
SFN 59959 (06-2011)	unoportat						
			100th Ave &	` ,			
Agency Name: F	-	•			DOT District:		
Contact Name: I				Teleph	one Number:	701-662-701	15
Email Address: h Please attach a location map(s). Y			urthor docoribo your pro	pioet			
Location Description	ou may us	se additional sheets to h	urrier describe your pro	лјест 			
zecanen zecenpaen					SHSP Emp	hasis Area (ch	eck all that apply)
					Reduce Alcohol		
Configuration: > Configuration (2): [Traffic Control Device: Street Lights:	•		Increase the Use Younger Driver/		straints for all Occupants
Urban/Rural: F		Flashers:			Curb Aggressive		alety
County: F	•	Major Entering ADT:			Improvements to	Address Lane	e Departure Crashes
Entering ADT: 2	<u>2</u> 445	Minor Entering ADT:					I Capabilities to Increase Survivability
		Major Leg:	Paved		Improve Intersed	ction Safety	
Describe Current Safety Is	sues & S	Systemic Ranking	Review				
North Dakota Crashes, 2008 - 201	12	5	years				
	Total	Angle	K+A				***
Crashes	0	0	0.00	_			0.0
Rate (per MVM)	0.0	0.0	0.0				
							10000
	Value	Critical	Risk Ranking	_			
Skew	Yes	Yes	*	_			45
On/Near Curve	Yes	Yes	*		1 36		
Development Near RR Crossing	No No	Yes Yes				元 是文	Contract of the Contract of th
Distance from previous STOP	Yes	Yes	*				
Volume Cross Product	Yes	≥ 100,000	*	1			
Total Crashes	0	>0	***		1		
Describe Proposed Safety	Improve	ements					
D	escription	Unit Cost		Units	Cost	Notes -	Segment projects suggested on
	oundabout		per intersection	0	\$0.00	140163 -	other sheets.
	nal Median	\$750,000	per intersection	0	\$0.00		
Mainline Dynamic Wa		. ,	per intersection	0	\$0.00		
Installing Str	se Median		per intersection per street light	0 1	\$0.00 \$6,000.00		
	Stop Sign		per sign	2	\$700.00		
Upgrade Jun			per sign	2	\$700.00		
Upgrade Stop Al Upgrade Stop Ahea			per sign per marking	2 0	\$900.00 \$0.00		
	e Stop Bar		per marking	0	\$0.00		
Review Signs	•	•	per intersection	0	\$0.00		
Ciana and Markinga and Street Lie	aht project	acata ware by the numb	or of minor logo coocia	atad with the inter	\$8,300.00		
Signs and Markings and Street Lig Project Cost Estimate (atta			er of minor legs associa		Year of Const	ruction	
Troject Cost Estimate (att	ion actai	neu oopy)		Поросси	1001 01 001101	14041011	
	eral Funds	\$7,470					
Local Match (10% of Total p <u>ro</u> Total Proj		\$830 \$8,300	=				
Total Floy	eci Cosi	ФО,300					
NDDOT Central Office Onl	У						
, .	Yes	□No	Reference Number			ID Number	
Notes							
							Danes C
						Into	Page: 6 rsection ID: 500.01
						iiile	Date: 10/24/2013

HIGHWAY SAFETY IMPROVE	MENT PROGRA	M (HSIP) PROJE	CT APPL	ICATION	
North Dakota Department of Transportat SFN 59959 (06-2011)	ion Programming				
	83rd	Ave NE (Rams	sey 507)	& US 2	
Agency Name: Ramsey				DOT District: 3	
Contact Name: Kevin Fie			Telep	hone Number: 7	01-662-7015
Email Address: hwydept					
Please attach a location map(s). You may us	se additional sheets to f	urther describe your proje	ect		
Location Description			1	OLIOD E	as's Assa (sheet all that and 1)
				Reduce Alcohol I	nasis Area (check all that apply)
Configuration: X	Traffic Control Device:	Thru Stop			of Safety Restraints for all Occupants
Configuration (2): Divided	Street Lights	•			Older Driver Safety
Urban/Rural: Rural	Flashers	No		Curb Aggressive	
County: Ramsey	Major Entering ADT			•	Address Lane Departure Crashes
Entering ADT: 3315	Minor Entering ADT Major Leg			Enhancing Emerg Improve Intersect	gency Medical Capabilities to Increase Survivabili
	iviajoi Leg	raveu		improve intersect	lion Salety
Describe Current Safety Issues & S	Systemic Ranking	Review			
North Dakota Crashes, 2008 - 2012		years			
Total	Angle	K+A			
Crashes 2 Rate (per MVM) 0.3	0 0.0	0.00 0.0			Part of the second
Rate (per MVM) 0.3	0.0	0.0	_		
					10000
Value	Critical	Risk Ranking	_		
Skew No	Yes				
On/Near Curve Yes	Yes	*			
Development No	Yes				
Near RR Crossing No Distance from previous STOP No	Yes Yes				
Volume Cross Product Yes	≥ 100,000	*			
Total Crashes 2	>0	*			
		***		ALES EN	
D					
Describe Proposed Safety Improve	ements				
Description	Unit Cost		Units	Cost	Notes - Segment projects suggested on
Roundabout		per intersection	0	\$0.00	other sheets.
Directional Median		per intersection	1	\$750,000.00	
Mainline Dynamic Warning Sign	\$50,000	per intersection	0	\$0.00	
Close Median	. ,	per intersection	0	\$0.00	
Installing Street Lights Upgrade Stop Sign	\$6,000 \$350	per street light per sign	1 2	\$6,000.00 \$700.00	
Upgrade Junction Sign		per sign	2	\$700.00	
Upgrade Stop Ahead Sign		per sign	2	\$900.00	
Upgrade Stop Ahead Marking		per marking	1	\$450.00	
Upgrade Stop Bar		per marking	2	\$500.00	
Review Signs and CST	\$2,450	per intersection	0	\$0.00	
Signs and Markings and Street Light project	costs vary by the numb	er of minor legs associate	ed with the inte	\$759,250.00 ersection	
Project Cost Estimate (attach detail		or or minor logo doccolar		d Year of Constr	ruction
r roject coot <u> (unuon uotu</u>	iou copy)				
Federal Funds	\$683,325				
Local Match (10% of Total project cost)	\$75,925	=			
Total Project Cost	\$759,250				
NDDOT Control Office Only					
NDDOT Central Office Only Project Accepted? □ Yes	□No	Reference Number	1	lır	D Number
Notes	□ 140	reference runiber	<u>-</u> 1	ļ I L	Number
					Page: 7
					Intersection ID: 507.01
					Date: 10/24/2013

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HIGHWAY SAFETY IM North Dakota Department of T			M (HSIP) PROJI	ECT APPLI	CATION			
SFN 59959 (06-2011)	тапоропал							
			E (Ramsey 8)					
Agency Name:	-	•			DOT District	-		
Contact Name:				Telepi	hone Number	: 701-662-70°	15	
Email Address: Please attach a location map(s).			urther describe your pro	niect				
Location Description	Tou may do	3 daditional oncoto to 1	artifor accorded your pro	7001				
Configuration: 2 Configuration (2): Urban/Rural: 1 County: 1 Entering ADT: 2	Undivided Rural Ramsey	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT: Major Leg:	No No 1138 130		Reduce Alcoho Increase the U Younger Drive Curb Aggressi Improvements	ol Impaired Drivi lse of Safety Re- r/Older Driver Save Driving to Address Landergency Medica	straints for all Occupants	
Describe Current Safety Is	ssues & S							
North Dakota Crashes, 2008 - 20	12	5	years					
	Total	Angle	K+A		G-15/	1 - 12 di		
Crashes	0	0	0.00		direction			
Rate (per MVM)	0.0	0.0	0.0		1 -	6	3.475	
						1		
						THE STATE OF THE S		
Skew	Value No	Critical Yes	Risk Ranking	 /		100	-	
On/Near Curve	No	Yes		1				
Development	Yes	Yes	*	1				
Near RR Crossing	No	Yes	_		-	多是 []		
Distance from previous STOP Volume Cross Product	Yes Yes	Yes ≥ 100,000	*		-			
Total Crashes	0	>0					H	

Describe Proposed Safety	/ Improve	ments						
-		Hait Coot		Haita	Coot	Notes		
	Description oundabout	Unit Cost \$1 000 000	per intersection	Units 0	Cost \$0.00	_ Notes -		
	nal Median	. , ,	per intersection	0	\$0.00			
Mainline Dynamic Wa			per intersection	0	\$0.00			
Clo Installing St	se Median		per intersection per street light	0 1	\$0.00 \$6,000.00			
	Stop Sign		per sign	2	\$700.00			
Upgrade Jur			per sign	2	\$700.00			
Upgrade Stop A Upgrade Stop Ahea			per sign per marking	2 2	\$900.00 \$900.00			
1 0	e Stop Bar		per marking	2	\$500.00			
Review Signs	s and CST	\$2,450	per intersection	0	\$0.00	_		
Signs and Markings and Street Li	aht project c	costs vary by the numb	er of minor legs associa	ated with the inte	\$9,700.00 ersection			
Project Cost Estimate (att			or or minor logo docooli		Year of Cons	struction		
		40.700						
Local Match (10% of Total pr	eral Funds	\$8,730 \$970						
Total Pro		\$9,700	-					
NDDOTO / LOW O								
NDDOT Central Office On Project Accepted?		□No	Reference Number			ID Number		
Notes	res	7 1/10	Reference Number			ID Number		
							Page: 8	
						Inte	rsection ID: 8.01	

LUGUNAN GAFETY III	IDD 61/5	MENT DDGGD4	M (UOID) DD 0 U		0.4.TION		
HIGHWAY SAFETY IM North Dakota Department of 1			M (HSIP) PROJI	ECT APPLIC	CATION		
SFN 59959 (06-2011)							
A Na	D	0	100th Ave &	` '	DOT District		
Agency Name: Contact Name:					DOT District: 3 one Number: 7		5
		t@stellarnet.com		relepii	one Number.	101-002-70	3
Please attach a location map(s).			urther describe your pro	oject			
Location Description							
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Divided Rural Ramsey	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT: Major Leg:	No No 2235 210		Reduce Alcohol Increase the Use Younger Driver/C Curb Aggressive Improvements to	Impaired Driving of Safety Resolder Driver Safety Resolder Driver Safety Driving Address Languerry Medica	straints for all Occupants
Describe Current Safety I	ssues &						
North Dakota Crashes, 2008 - 20)12	5	years				
	Total	Angle	K+A		Marie Company		THE RESERVE OF THE PARTY OF THE
Crashes	0	0	0.00	_			III WELL THE
Rate (per MVM)	0.0	0.0	0.0	_ [00		《 11] [] [] [] [] [] [] [] [] [
					0 30		
	Malua	Onitional	Diale Dandina	-			
Skew	Value No	Critical Yes	Risk Ranking		1		- (B)
On/Near Curve	Yes	Yes	*	\$			740
Development	No	Yes		1		9 / 2 2	
Near RR Crossing Distance from previous STOP	No Yes	Yes Yes	*				
Volume Cross Product	Yes	≥ 100,000	*				Control of the Contro
Total Crashes	0	>0	***	_ [
Describe Proposed Safety	y Improv	ements					
!	Description	Unit Cost		Units	Cost	Notes -	Segment projects suggested on
	Roundabout	. , ,	per intersection	0	\$0.00		other sheets.
Mainline Dynamic Wa	nal Median arnina Sian	. ,	per intersection per intersection	0 0	\$0.00 \$0.00		
Clo	ose Median	\$25,000	per intersection	0	\$0.00		
Installing Si	treet Lights e Stop Sign		per street light per sign	1 1	\$6,000.00 \$350.00		
Upgrade Ju			per sign	1	\$350.00		
Upgrade Stop A Upgrade Stop Ahe			per sign	1	\$450.00 \$450.00		
10	de Stop Bar	,	per marking per marking	1	\$250.00		
Review Sign	s and CST	\$2,450	per intersection	0	\$0.00		
Signs and Markings and Street L	iaht proiect	t costs varv by the numb	er of minor leas associa	ated with the inter	\$7,850.00 section.		
Project Cost Estimate (att					Year of Const.	ruction	
Foo	leral Funds	\$7,065					
Local Match (10% of Total p		. ,					
Total Pro	ject Cost		_				
NDDOT Central Office On	dy						
Project Accepted?		□No	Reference Number		li	D Number	
Notes							
						Into	Page: 9 rsection ID: 501.01
						iiite	Date: 10/24/2013

HIGHWAY SAFETY IMPROVEN		M (HSIP) PROJE	CT APPLI	CATION	
North Dakota Department of Transportation SFN 59959 (06-2011)	on Programming				
	•	amsey 2) & 83ı			
Agency Name: Ramsey C				DOT District:	
Contact Name: Kevin Field Email Address: hwydept@			reiepr	none Number:	701-002-7015
Please attach a location map(s). You may use		urther describe your proje	ect		
Location Description					
				SHSP Empl Reduce Alcohol	hasis Area (check all that apply)
Configuration: X	Fraffic Control Device:	Thru Stop			e of Safety Restraints for all Occupants
Configuration (2): Undivided	Street Lights:			Younger Driver/0	Older Driver Safety
Urban/Rural: Rural County: Ramsey	Flashers: Major Entering ADT:			Curb Aggressive	e Driving o Address Lane Departure Crashes
Entering ADT: 1280	Minor Entering ADT:			•	rgency Medical Capabilities to Increase Survivability
Č	Major Leg	Paved	✓	Improve Intersec	
Describe Current Safety Issues & S	vstemic Ranking	Review			
North Dakota Crashes, 2008 - 2012		years			
Total	Analo	IZ . A			
Total Crashes 1	Angle 0	0.00	-		
Rate (per MVM) 0.4	0.0	0.0	_		
Value	Critical	Risk Ranking			The second second second
Skew No	Yes		_	- Live	
On/Near Curve No	Yes			是	
Development No Near RR Crossing No	Yes Yes		į		
Distance from previous STOP No	Yes				
Volume Cross Product Yes	≥ 100,000	*		时人的	
Total Crashes 1	>0	**	_	到一个小量	
Describe Proposed Safety Improver	monto				
Describe Proposed Salety Improver	nents				
Description	Unit Cost		Units	Cost	Notes - Segment projects suggested on
Roundabout Directional Median		per intersection per intersection	0 0	\$0.00 \$0.00	other sheets.
Mainline Dynamic Warning Sign		per intersection	1	\$50,000.00	
Close Median	\$25,000	per intersection	0	\$0.00	
Installing Street Lights Upgrade Stop Sign		per street light per sign	1 2	\$6,000.00 \$700.00	
Upgrade Junction Sign		per sign	2	\$700.00	
Upgrade Stop Ahead Sign	\$450	per sign	2	\$900.00	
Upgrade Stop Ahead Marking Upgrade Stop Bar		per marking per marking	1 1	\$450.00 \$250.00	
Review Signs and CST	•	per intersection	Ö	\$0.00	
				\$59,000.00	
Signs and Markings and Street Light project of Project Cost Estimate (attach detail		er of minor legs associat		rsection. I Year of Const	ruction
110joot Oot Zoumato (uttaon uotam	ou copy,		l	1001 01 001100	
Federal Funds	\$53,100 \$5,900				
Local Match (10% of Total project cost) Total Project Cost	\$5,900 \$59,000	-			
•					
NDDOT Central Office Only	1	ID-(N	<u> </u>		ID Marshare
Project Accepted?	No	Reference Number		JI	D Number
					Page: 10
					Intersection ID: 2.01 Date: 10/24/2013

HIGHWAY SAFETY IM North Dakota Department of T	IPROVE Transportat	MENT PROGRA tion Programming	M (HSIP) PROJE	CT APPLIC	CATION				
SFN 59959 (06-2011)		40th St	NE 2 72nd Av	NE (Par	150V 506)				
Contact Name:	Agency Name: Ramsey County Contact Name: Kevin Fieldsend			ND I	NE (Ramsey 506) ND DOT District: 3 Telephone Number: 701-662-7015				
Email Address: Please attach a location map(s).		@stellarnet.com	urthor docariba vaur prai	ioot					
Location Description	Tou may us	se additional sheets to h	urther describe your proj	eci					
Configuration: Configuration (2): Urban/Rural:	Undivided Rural Ramsey	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT: Major Leg:	No No 885 60		Reduce Alcohol Increase the U Younger Driver Curb Aggressiv Improvements	r/Older Driver Safety ve Driving to Address Lane De ergency Medical Ca	ints for all Occupants		
Describe Current Safety Is	ssues & :	Systemic Ranking	Review						
North Dakota Crashes, 2008 - 20			years						
Crashes Rate (per MVM)	Total 1 0.6	Angle 0 0.0	K+A 0.00 0.0			6	(S)		
Skew	Value No	Critical Yes	Risk Ranking	_					
On/Near Curve Development Near RR Crossing	No No No	Yes Yes Yes							
Distance from previous STOP Volume Cross Product	Yes No	Yes ≥ 100,000	*	-	3.6				
Total Crashes	1	>0	**	_					
Describe Proposed Safety	v Improve	omonts							
Describe i roposca Garet	mprove	monto							
	Description Roundabout		per intersection	Units 0	Cost	Notes -			
	nal Median		per intersection	0	\$0.00 \$0.00				
Mainline Dynamic Wa			per intersection	0	\$0.00				
Installing St	ose Median treet Lights		per intersection per street light	0 0	\$0.00 \$0.00				
Upgrade	e Stop Šign	\$350	per sign	2	\$700.00				
Upgrade Jui Upgrade Stop <i>I</i>			per sign per sign	2 2	\$700.00 \$900.00				
Upgrade Stop Ahe			per marking	1	\$450.00				
1.0	de Stop Bar		per marking	1	\$250.00				
Review Sign	is and CST	\$2,450	per intersection	0	\$0.00 \$3,000.00	_			
Signs and Markings and Street L	ight project	costs vary by the numb	er of minor legs associa	ted with the inter					
Project Cost Estimate (att			ÿ		Year of Cons	struction			
F	lanal Eurala	#0.700							
Local Match (10% of Total p	deral Funds	\$2,700 \$300							
	ject Cost		-						
NDDOT O () O(() O									
NDDOT Central Office On Project Accepted?		□No	Reference Number			ID Number			
Notes	☐ 163		Neierence Mulliber			ID Number			
						Intersec	Page: 11 ction ID: 506.01		

HIGHWAY SAFETY IM			M (HSIP) PROJE	CT APPLIC	ATION		
North Dakota Department of T SFN 59959 (06-2011)	ransporta	tion Programming					
, , ,		US	2 & 96th Ave N	√E (Rams€	ey 4)		
Agency Name:	Ramsey			•	OOT District: 3	3	
Contact Name:				Telepho	one Number: 7	701-662-701	5
		t@stellarnet.com					
Please attach a location map(s).	You may u	se additional sheets to f	urther describe your proj	ect			
Location Description							
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Divided Rural Ramsey	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT: Major Leg:	No No 1775 153		Reduce Alcohol Increase the Use Younger Driver/O Curb Aggressive Improvements to	Impaired Drivir of Safety Res Older Driver Sa Driving Address Lane gency Medical	traints for all Occupants
Describe Current Safety Is	ssues &	Systemic Ranking	Review				
North Dakota Crashes, 2008 - 20)12		years				
			14. A	_			
Crashes	Total 0	Angle 0	K+A 0.00	_			
Rate (per MVM)	0.0	0.0	0.00				
reate (per livili)				_			
Skew	Value No	Critical Yes	Risk Ranking	_	-		
On/Near Curve	No	Yes			-	THE REAL PROPERTY.	4 (CA)
Development	No	Yes		£			
Near RR Crossing	No	Yes			Talle		(C)
Distance from previous STOP	Yes	Yes	*	6	2		
Volume Cross Product	Yes	≥ 100,000	*			1	
Total Crashes	0	>0	**	_	3	3/1/	000
			^^			•	
Describe Proposed Safety	y Improv	ements					
	D	Heli Occi		11.30	01	Natas	C
	Description Coundabout		per intersection	Units 0	\$0.00		Segment and curve projects suggested on other sheets.
	nal Median	. , ,	per intersection	0	\$0.00		suggested on other sheets.
Mainline Dynamic Wa		*/	per intersection	0	\$0.00		
	ose Median	\$25,000	per intersection	0	\$0.00		
Installing St			per street light	1	\$6,000.00		
	Stop Sign		per sign	2	\$700.00		
Upgrade Jur Upgrade Stop A			per sign per sign	2 2	\$700.00 \$900.00		
Upgrade Stop Ahea		·	per marking	1	\$450.00		
	le Stop Bar	,	per marking	1	\$250.00		
Review Sign	s and CST	\$2,450	per intersection	0	\$0.00		
					\$9,000.00		
Signs and Markings and Street L	ight project	costs vary by the numb	er of minor legs associat				
Project Cost Estimate (att	acn aeta	шеа сору)		Proposea	Year of Const	ruction	
Fed	leral Funds	\$8,100					
Local Match (10% of Total p		. ,					
Total Pro			-				
NDDOT Central Office On			I=	_		T	
Project Accepted?	Yes	□No	Reference Number		l	D Number	
Notes							
						Into	Page: 12 section ID: 4.01
						mer	Date: 10/24/2013

HIGHWAY SAFETY IM			M (HSIP) PROJE	CT APPLIC	ATION	
North Dakota Department of T SFN 59959 (06-2011)	ransportation		NE 9 00m d Ave	NE (Dave	504	
A N	D O -		NE & 92nd Ave	-		
Agency Name: Contact Name:					DOT District:	-
Email Address:				reiepno	one Number.	701-662-7015
Please attach a location map(s).			urther describe your proi	ect		
Location Description	Tou may doo c	additional onooto to i	artifor december year proj			
					SHSP Emp	phasis Area (check all that apply)
	_					I Impaired Driving
Configuration: Configuration: Configuration (2):		raffic Control Device:	•			se of Safety Restraints for all Occupants
Urban/Rural:		Street Lights: Flashers:			Curb Aggressiv	/Older Driver Safety e Driving
County:		Major Entering ADT:				o Address Lane Departure Crashes
Entering ADT:		Minor Entering ADT:	225			ergency Medical Capabilities to Increase Survivability
		Major Leg	Paved	✓	Improve Interse	ection Safety
Describe Current Safety Is	SCHOOL & SV	stomic Pankina	Paviaw			
North Dakota Crashes, 2008 - 20	112		years			
,			,			
Charles	Total	Angle	K+A	_		
Crashes Rate (per MVM)	0 0.0	0 0.0	0.00 0.0			
rate (per invin)	0.0	0.0	0.0	_		
				6		
Skew	Value No	Critical Yes	Risk Ranking	_		
On/Near Curve	No	Yes		140	OF THE PARTY	
Development	No	Yes				
Near RR Crossing	No	Yes				
Distance from previous STOP	Yes	Yes	*			
Volume Cross Product Total Crashes	Yes 0	≥ 100,000 >0	*			
Total Clasiles	U	>0	**	_		
Describe Proposed Safety	/ Improvem	ents				
_	Description	Unit Cost		Units	Cost	Notes -
	oundabout		per intersection	0	\$0.00	110163 -
	nal Median	. , ,	per intersection	0	\$0.00	
Mainline Dynamic Wa	~ ~		per intersection	0	\$0.00	
	se Median		per intersection	0	\$0.00	
Installing St Upgrade	reet Lights Stop Sign		per street light per sign	1 2	\$6,000.00 \$700.00	
Upgrade Jur			per sign	2	\$700.00	
Upgrade Stop A	Ahead Sign		per sign	2	\$900.00	
Upgrade Stop Ahea			per marking	1	\$450.00	
. •	e Stop Bar		per marking	2	\$500.00	
Review Sign	s and CST	\$2,450	per intersection	0	\$0.00 \$9,250.00	•
Signs and Markings and Street Li	ight project cos	sts vary by the numb	er of minor legs associat	ted with the inters	. ,	
Project Cost Estimate (att	tach detaile	d copy)		Proposed	Year of Cons	truction
Fed Local Match (10% of Total pr	eral Funds	\$8,325 \$925				
Total Pro		\$9,250	-			
	,001 0001	40,200				
NDDOT Central Office On	,					
Project Accepted?	Yes N	No	Reference Number			ID Number
Notes						
						Page: 13
						Intersection ID: 504.01 Date: 10/24/2013
Ī						Date. 10/2-1/2010

HIGHWAY SAFETY IM	PROVE	MENT PROGRA	M (HSIP) PROJ	ECT APPLI	CATION	
North Dakota Department of T SFN 59959 (06-2011)		ion Programming				
Agency Name: Contact Name: Email Address:	Kevin Fie	County eldsend	Ramsey 2) & 9	ND	NE (Ramse) DOT District: none Number:	3
Please attach a location map(s).			urther describe your pro	oiect		
Location Description			, , , , ,	,		
Configuration: ⁻ Configuration (2): \ Urban/Rural: \ County: \ Entering ADT: \	Undivided Rural Ramsey	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT: Major Leg:	No No 420 240		Reduce Alcohol Increase the Us Younger Driver/ Curb Aggressive Improvements to	o Address Lane Departure Crashes ergency Medical Capabilities to Increase Survivability
Describe Current Safety Is	ssues & S	Systemic Ranking	Review			
North Dakota Crashes, 2008 - 20	12		years			
	T. (- 1	A	17. 4			
Crashes	Total 0	Angle 0	K+A 0.00	— I		
Rate (per MVM)	0.0	0.0	0.00	_	1 ha 1	
	Value	Critical	Diek Denking			
Skew	Value No	Critical Yes	Risk Ranking	— I		
On/Near Curve	No	Yes			See S	and the second
Development	No	Yes				
Near RR Crossing	No	Yes				
Distance from previous STOP	Yes	Yes	*			A A LAND IN
Volume Cross Product Total Crashes	Yes 0	≥ 100,000 >0	*			U
			**	_ ,		A PORT OF
Describe Proposed Safety	/ Improve	ements				
F) Occariation	Unit Coot		Lloito	Coot	Notes Cogment projects suggested on
	Description oundabout	Unit Cost \$1,000,000	per intersection	Units 0	Cost \$0.00	Notes - Segment projects suggested on other sheets.
	nal Median		per intersection	0	\$0.00	other shoots.
Mainline Dynamic Wa			per intersection	0	\$0.00	
Clo	se Median	\$25,000	per intersection	0	\$0.00	
Installing St			per street light	1	\$6,000.00	
. •	Stop Sign		per sign	1	\$350.00	
Upgrade Jur Upgrade Stop A			per sign per sign	1	\$350.00 \$450.00	
Upgrade Stop Ahea		·	per marking	1	\$450.00	
10 1	e Stop Bar		per marking	1	\$250.00	
Review Signs	s and CST	\$2,450	per intersection	0	\$0.00	
					\$7,850.00	
Signs and Markings and Street Li	ght project	costs vary by the numb	er of minor legs associa			444
Project Cost Estimate (att	acn detai	пеа сору)		Proposed	I Year of Cons	truction
Fede	eral Funds	\$7,065				
Local Match (10% of Total pr		\$785				
Total Proj		\$7,850	-			
NDDOT Control Office On	1					
NDDOT Central Office Onli Project Accepted?	•	□No	Reference Number			ID Number
Notes	☐ Yes	_ NO	Reference Number			ID Number
Notes						
						Page: 14
						Intersection ID: 2.02 Date: 10/24/2013

23 USC 409 NDDOT Reserves All Objections

Walsh County

Walsh County Rural Segment Projects

								6" Edge	
Page	Corridor ID	Route #	Start	End	Length	Risk Ranking	4" Edge Line	Lines	Project Cost (\$)
1	19.06	Walsh 19	Curve from 56th Street (approx. 4.5 miles east of ND 32)	Intersection with ND 18	7.8	***	7.8	0.0	\$3,120.00
2	15.09	Walsh 15	Curve from 142nd Avenue	Intersection with US 81	8.6	***	0.0	8.6	\$5,590.00
3	9.03	Walsh 9	Intersection with 119th Avenue	Edinburg west city limit (intersection with 5th Street)	10.0	****	10.0	0.0	\$4,000.00
4	12.14	Walsh 12	Park River north city limit (5-leg intersection)	Walsh / Pembina County Line	8.8	***	0.0	8.8	\$5,720.00
5	15.05	Walsh 15	Intersection with ND 32	Pisek west city limit (intersection with Sunset Avenue)	6.7	***	6.7	0.0	\$2,680.00
6	12.04	Walsh 12B	Begin gravel section	End gravel section	1.4	***	1.4	0.0	\$560.00
7	19.03	Walsh 19	Intersection with ND 32	Fordville west city limit	2.5	***	0.0	2.5	\$1,625.00
8	9.08	Walsh 9	Intersection with SH 32	Intersection with SH 18	11.1	***	11.1	0.0	\$4,440.00
9	12.01	Walsh 12B	Walsh/Grand Forks County Line	Fordville south city limit (intersection with 55th Street that tees in from east)	1.0	***	1.0	0.0	\$400.00
10	4.05	Walsh 4	Intersection with County Road 11 / 70th Street	End pavement / begin gravel	4.5	***	4.5	0.0	\$1,800.00
11	8.01	Walsh 8	Begin tangent section after curve from 62nd Street	End pavement / begin gravel	1.9	***	0.0	1.9	\$1,235.00
							42.5	21.8	\$31,170.00

Walsh County

Rural Segment Listing

15.02

15.03

15.09

16.03

19.03

Walsh 12B Curve from 131st Avenue

Walsh 12A Curve from 136th Street

Walsh 14 Walsh / Nelson County Line

Walsh 15 Walsh / Ramsey County Line

Walsh 15 Intersection with 125th Avenue

Intersection with US 81

Walsh 15 Intersection with SB IH 29 Ramps

Walsh 15 Intersection with NB IH 29 Ramps

Intersection with 75th Street

503.01 No designation Intersection with 69th Place (west of Grafton)

504.01 No designation Intersection with Westwood Drive (west of Grafton

Walsh 16 Intersection with 74th Street

Walsh 19 Walsh / Ramsey County Line

Walsh 19 Intersection with ND 35

Walsh 19 Intersection with ND 32

Walsh 19 Fordville west city limit

Walsh 19 Fordville east city limit

Walsh 15 Minto east city limit (intersection with 151st Avenue)

Walsh 19 Curve from 56th Street (approx. 4.5 miles east of ND 32)

Walsh 12A Curve from 61st Street

Walsh 15 Intersection with ND 35

Walsh 15 Intersection with ND 32

Walsh 15 Curve from 142nd Avenue

Walsh 12 Park River north city limit (5-leg intersection)
Walsh 12A Intersection with 55th Street

12.08 Walsh 12B Curve from 66th Street

Walsh 15

Corridor End Departure Departure Radius / Mile (miles) Density Assesment Density Walsh 1A Hoople east city limit (approx 400 feet east of intersection with Dale Avenue)

Walsh 1B Hoople east city limit (Intersection with Glendale Avenue)

Walsh 4 Begin tangent section after curve from 155th Avenue Intersection with ND 18 Intersection with ND 18 Begin curve from 66th Street Intersection with ND 17 0.00 0.00 4.03 Walsh 4 3.0 0.00 4.3 Intersection with County Road 11 / 70th Street End pavement / begin gravel 4.06 Walsh 4 End pavement / begin gravel Walsh / Pembina County Line 2.8 290 0.00 8.6 0.00 0.00 Intersection with 55th Street Walsh / Nelson County Line Begin tangent section after curve from 62nd Street End pavement / begin gravel Curve into 67th Street 8.02 Walsh 8 End pavement / begin gravel 4.0 0.00 0.00 1.00 Intersection with 112th Avenue Intersection with 119th Avenue 7.0 0.00 2.00 0.00 9.03 Walsh 9 Intersection with 119th Avenue Edinburg west city limit (intersection with 5th Street 10.0 440 0.04 0.20 2 00 9.08 Walsh 9 Intersection with SH 32 Intersection with SH 18 11.1 353 0.07 0.27 1.00 9.09 Walsh 9 Intersection with ND 18 Intersection with US 81 9.0 391 0.02 0.00 1.00 Intersection with 155th Avenue 4.9 9.11 Walsh 9 Intersection with 155th Avenue Intersection with SB IH 29 Ramps 240 0.00 0.00 2.00 Intersection with NB IH 29 Ramps Intersection with SB IH 29 Ramps 13.2 0.00 0.00 0.00 Walsh 11A Adams east city limit (could be driveway on north side, approximately 760 feet north of ND 17) Intersection with ND 17 14.7 0.00 1.00 Walsh 12B Walsh/Grand Forks County Line Fordville south city limit (intersection with 55th Street that tees in from east) 340 0.20 11.0 0.00 1.00 2.0 0.00 Walsh 12B Fordville north city limit (intersection with 56th Street) Begin gravel section 12.04 Walsh 12B Begin gravel section End gravel section 1.4 260 0.15 6.6 0.00 2.00 Walsh 12B End gravel section Begin gravel section Curve into 66th Street 0.9 120 0.21 4.22 1.00 Walsh 12B Begin gravel section

Park River south city limit (intersection with 67th Street)

Pisek west city limit (intersection with Sunset Avenue)

Minto east city limit (intersection with 151st Avenue)

Lankin east city limit (next driveway after Prospect Street intersection)

Curve into 134th Avenue

Curve into 61st Street

Curve into 135th Avenue

Intersection with US 81

Intersection with 62nd Street

Intersection with 125th Avenue

Intersection with SB IH 29 Ramps

Intersection with NB IH 29 Ramps

Intersection with 158th Drive

End of second horizontal curve

Walsh/Cavalier County Line

End of north/south segment

Intersection with School Road

Walsh/Cavalier County Line

Intersection with ND 35

Intersection with ND 32

Fordville west city limit

Fordville east city limit

Intersection with ND 18

Walsh / Pembina County Line

Edge Risk Legend
1 Risky' - NEITHER shoulder or good clear zone 2 Either a shoulder OR good clear zone 3 BOTH shoulder and a good clear zone
Critical ADT Range - Lane Departure
150

500

		Lane	Critical Radius		
	Access	Departure	Curves		
Total	2580	47	10		
Total Mileage	otal Mileage 187.2		187.2		
Years		5			
Average Density (Total/Mile)	13.8	0.05	0.05		

Lane

1.9

1.3

8.8

5.0

0.4

8.0

8.0

6.7

8.6

0.4

7.9

0.2

4 0

12.0

1.0

1.0

7.8

240

195

426

320

305

387

478

611

410

473

345

110

303

410

380

390

350

160

0.10

0.00

0.00

0.00

0.03

0.00

0.09

0.00

0.00

0.10

0.00

0.00

0.08

0.00

7.6

12.6

7.4

6.5

15.6

12.2

3.8

37.6

4.8

Lane

Curves w/ Critical

0.00

0.00

0.23

0.00

0.00

0.00

0.00

0.00

0.12

0.00

0.00

0.00

0.00

0.00

1.19

2.05

0.00

0.00

0.00

Edge Risk

0.00

0.00 0.00

2.00

1.00

0.00

1.00

1.00

1.00

2.00

1.00

1.00

1.00

1.00

0.00

0.00

1.00

1.00

1.00

3.00

1.00

1.00

10/23/2013

Walsh County Rural Segment Prioritization - Lane Departure Priority

#								Lane Departure	Access	Curve Critical	Edge			eakers
#	Corridor	Route	Start	End	Length	ADT /	ADT Range	Density		Radius Density	Risk	Totals	Edge Risk	ADT
1	9.03	Walsh 9	Intersection with 119th Avenue	Edinburg west city limit (intersection with 5th Street)	10.0	440	*	*		*	*	****	2	440
2	19.06	Walsh 19	Curve from 56th Street (approx. 4.5 miles east of ND 32)	Intersection with ND 18	7.8	390	*	*			*	***	3	390
3	15.09	Walsh 15	Curve from 142nd Avenue	Intersection with US 81	8.6	611		*	-	*	*	***	2	611
4	12.14	Walsh 12	Park River north city limit (5-leg intersection)	Walsh / Pembina County Line	8.8	426	*			*	*	***	2	426
5	15.05	Walsh 15	Intersection with ND 32	Pisek west city limit (intersection with Sunset Avenue)	6.7	370	*	*			*	***	2	370
6	12.04	Walsh 12B	Begin gravel section	End gravel section	1.4	260	*	*	-		*	***	2	260
7	19.03	Walsh 19	Intersection with ND 32	Fordville west city limit	2.5	410	*	*		*		***	1	410
8	9.08	Walsh 9	Intersection with SH 32	Intersection with SH 18	11.1	353	*	*	-	*		***	1	353
9	12.01	Walsh 12B	Walsh/Grand Forks County Line	Fordville south city limit (intersection with 55th Street that tees in from east)	1.0	340	*	*	*			***	1	340
10	4.05	Walsh 4	Intersection with County Road 11 / 70th Street	End pavement / begin gravel	4.5	281	*		*	*		***	1	281
11	8.01	Walsh 8	Begin tangent section after curve from 62nd Stree	End pavement / begin grave	1.9	275	*	*	*			***	1	275
12	9.02	Walsh 9	Intersection with 112th Avenue	Intersection with 119th Avenue	7.0	290	*				*	**	2	290
13	9.11	Walsh 9	Intersection with 155th Avenue	Intersection with SB IH 29 Ramps	4.9	240	*				*	**	2	240
13	15.03	Walsh 15	Intersection with 125th Avenue	Lankin east city limit (next driveway after Prospect Street intersection)	1.5	478	*		*			**	1	478
14	15.12	Walsh 15	Minto east city limit (intersection with 151st Avenue)	Intersection with SB IH 29 Ramps	7.9	473	*	*				**	1	473
15	15.11	Walsh 15	Intersection with US 81	Minto east city limit (intersection with 151st Avenue)	0.4	410	*		*			**	1	410
16	19.04	Walsh 19	Fordville west city limit	Fordville east city limit	1.0	380	*		*			**	1	380
17	11.01	Walsh 11A	Adams east city limit (could be driveway on north side, approximately 760 feet north of ND 17)	Intersection with ND 17	0.1	350	*		*			**	1	350
18	22.03	Walsh 22	Intersection with 75th Street	Walsh/Cavalier County Line	3.4	350	*		*			**	1	350
19	15.13	Walsh 15	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.2	345	*		*			**	1	345
20	12.15	Walsh 12A	Intersection with 55th Street	Curve into 61st Street	5.0	320	*	*				**	1	320
21	19.05	Walsh 19	Fordville east city limit	End of second horizontal curve	1.0	250	*			*		**	1	250
22	9.1	Walsh 9	Intersection with US 81	Intersection with 155th Avenue	5.8	218	*	*				**	1	218
23	12.05	Walsh 12B	End gravel section	Begin gravel section	0.9	120		*		*		**	1	120
24	12.1	Walsh 12B	Intersection with 8th Street	Intersection with ND 17 / Park Street	0.1	700		*	*			**	0	700
25	12.17	Walsh 12A	Curve from 61st Street	End gravel section	0.4	320	*	*	-			**	0	320
26	4.06	Walsh 4	End pavement / begin gravel	Walsh / Pembina County Line	2.8	290	*		*			**	0	290
27	12.07	Walsh 12B	Curve from 131st Avenue	Curve into 134th Avenue	1.9	240	*	*				**	0	240
28	12.06	Walsh 12B	Begin gravel section	Curve into 66th Street	5.9	132					*	*	2	132
29	6.01	Walsh 6	Walsh / Nelson County Line	Intersection with 55th Street	1.0	500	*					*	1	500
30	9.09	Walsh 9	Intersection with ND 18	Intersection with US 81	9.0	391	*					*	1	391
31	15.02	Walsh 15	Intersection with ND 35	Intersection with 125th Avenue	8.0	387	*					*	1	387
32	14.01	Walsh 14	Walsh / Nelson County Line	Intersection with 62nd Street	8.0	305	*					*	1	305
33	15.01	Walsh 15	Walsh / Ramsey County Line	Intersection with ND 35	7.0	305	*					*	1	305
34	12.03	Walsh 12B	Fordville north city limit (intersection with 56th Street)	Begin gravel section	2.0	260	*					*	1	260
35			Intersection with Westwood Drive (west of Grafton)	Intersection with School Road	2.2	160	*		-			*	1	160
36	8.02	Walsh 8	End pavement / begin gravel	Curve into 67th Street	4.0	120			*			*	1	120
37	16.03	Walsh 16	Intersection with 74th Street	Walsh/Cavalier County Line	4.0	110		*				*	1	110
38	15.14	Walsh 15	Intersection with NB IH 29 Ramps	Intersection with 158th Drive	0.1	80			*			`	1	80
39	1.01	Walsh 1A	Hoople east city limit (approx 400 feet east of intersection with Dale Avenue)	Intersection with ND 18	0.4	515			*			*	Ö	515
40	19.02	Walsh 19	Intersection with ND 35	Intersection with ND 32	12.0	393	*					*	0	393
41	1.02	Walsh 1B	Hoople east city limit (Intersection with Glendale Avenue)	Intersection with ND 18	0.5	390	*					*	0	390
42	12.16	Walsh 12A	Curve from 136th Street	Curve into 135th Avenue	0.8	320	*						0	320
43	19.01	Walsh 19	Walsh / Ramsey County Line	Intersection with ND 35	7.0	303	· *					`	0	303
46	12.08	Walsh 12B	Curve from 66th Street	Park River south city limit (intersection with 67th Street)	1.3	195	*					*	0	195
46			Intersection with 69th Place (west of Grafton)	End of north/south segment	1.5	160	*					- -	0	160
47	9.12	Walsh 9	Intersection with SB IH 29 Ramps	Intersection with NB IH 29 Ramps	0.1	90			*			-	0	90
48	4.02	Walsh 4	Begin tangent section after curve from 155th Avenue	Begin curve into 156th Avenue	0.8	85							0	85
56	4.02	Walsh 4	Begin curve from 66th Street	Intersection with ND 17	3.0	85			-				0	85
50	4.00	**************************************	Dogin out to non oour officer	morecount man ND 17		Stars	38	17	15	8	9			- 00

	#	%	%
****	0	0%	0%
****	1	2%	5%
***	10	20%	29%
**	17	35%	24%
*	19	39%	40%
	2	4%	2%
	49	100%	100%

Stars

ADT Range - Iff segment has an ADT in the range of most at risk ADT based on Northeast totals. (150 < ADT < 500)

Lane Departure Density - If segment has higher lane departure density than the Northeast average (0.032).

Access Density Iff segment has access density than the nationwide average (8).

Curve Critical Radius Density - Iff segment has higher density of curves with critical radius than the Northeast average (0.084).

Edge Risk Assessment - Edge risk of 2 or 3, based on assessment of roadway edge and clear zone.

LUCUWAY CAFETY IMPROVEMENT BROA	SDAM (HEID) DDA IE	CT ADDI ICAT	TION				
HIGHWAY SAFETY IMPROVEMENT PROC North Dakota Department of Transportation Programmin		CT APPLICAT	ION				
SFN 59959 (06-2011) Walsh 19 from C	urve from 56th Sti	reet (annroy	4.5 mil	26 636	t of ND	32) to Intersection with ND 18	
Agency Name:		eet (appilox	ND DOT I			52) to intersection with ND 10	
Contact Name:		To	elephone N			530	
Email Address:	slipsh@nd.gov						
Please attach a location map(s). You may use additional shee		ect.					
Location Description						OHOD Farabasis Ass. ()	
Start	Curve from 56th Street (appro	Lane Width:	12'		Reduce Alco	SHSP Emphasis Area (check all that apply) hol Impaired Driving	
End:	ntersection with ND 18	Speed Limit: Shoulder Width:	High		Increase the	Use of Safety Restraints for all Occupants	
	Facility Type: 2-Lane ADT: 390				Younger Driv Curb Aggres	/er/Older Driver Safety	
Road Type	Road Type Rural Paved			✓	Improvement	ts to Address Lane Departure Crashes	
County Road	Walsh 19	Length (miles): Rumble Installed:	No		Enhancing E	mergency Medical Capabilities to Increase Survivability	
					improve Inte	rsection Safety	
Describe Current Safety Issues & Systemic Ran	king Review						
North Dakota Crashes, 2008 - 2012		5	years				
	Total	Road Dept	K+A		Wisinb With World	PARTONS APP	
Crashes	6	3	0		West		
Density (per mile per year) Rate (per MVM)	0.15 1.08	0.08 0.54	0.00 0.00				
naie (pei MVM)	1.00	0.34	0.00				
	Value	Critical	Road				
ADT Range	390	150≤ADT≤500	*				
RD Density	0.077	0.032	*				
Access Density Curve Critical Radius Density	4.8 0.000	8.0 0.084					
Edge Risk	3	2 or 3	*		WG5-81		
			***		W-31 5947/002	SRF	
Describe Proposed Safety Improvements							
	Descript'	Torre	Cook	Mile	Ca	Notes Ouglifies for edge line	
<u>-</u>	Description 4" Edge Lines	Type Proactive	Cost per mi \$400	7.8	Cost \$3,120	Notes - Qualifies for edge line rumble.	
	6" Edge Lines	Proactive	\$650	0.0	\$0		
Comm	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0 \$0		
Groun	d In Wet-Reflective Markings Center Line Rumble Strip	Proactive Proactive	\$8,500 \$3,000	0.0	\$0		
<u>.</u>	6" Center Line	Proactive	\$650	0.0	\$0		
Project Cost Estimate (attach detailed copy)				Propose	ed Year of	Construction	
- January (action detailed copy)				Cpost	. J. Juli Ol		
1 1 44-4-	Federal Funds	\$2,808 \$312					
Local Mate	h (10% of Total project cost) Total Project Cost	\$312 \$3,120	-				
		*-,					
NDDOT Central Office Only Project Accepted?	□Yes □No F	Reference Number				ID Number	
Notes	□Yes □No F	reletetice Mutibel	1			ID NUMBER	
						Page: 1 Segment ID: 19.06	
						Date: 10/23/20	13

HIGHWAY SAFETY IMPROVEMENT PRO		CT APPLICA	TION							
SFN 59959 (06-2011)	iiig									
•	Walsh 15 from Curv	ve from 142	nd Aveni	ue to I	ntersec	ction with US 81				
Agency Name	: Walsh County		ND DOT	District:	6					
	: Sharon Lipsh	7	Telephone N	lumber:	701-352-	-1530				
	: slipsh@nd.gov									
Please attach a location map(s). You may use additional she	ets to further describe your proje	ect.								
Location Description						CUCD Freehanis Asso (shook all that such)				
Start	Curve from 142nd Avenue	Lane Width	r 12'		Reduce Ald	SHSP Emphasis Area (check all that apply) cohol Impaired Driving				
	: Intersection with US 81	Speed Limit			Increase th	ne Use of Safety Restraints for all Occupants				
Facility Type		Shoulder Width				Priver/Older Driver Safety				
ADT Pood Tyre	: 611 e Rural Paved	Shoulder Type Length (miles)			Curb Aggre	essive Driving				
County Road		Rumble Installed		 ✓ Improvements to Address Lane Departure Crashes ✓ Enhancing Emergency Medical Capabilities to Increase Survivability 						
•					Improve In	tersection Safety				
D										
Describe Current Safety Issues & Systemic Ra. North Dakota Crashes, 2008 - 2012	nking Review		5 years							
Notifi Dakola Clasiles, 2006 - 2012		•	o years		10000	CONTRACTOR				
	Total	Road Dept	K+A		Plat Street	The state of the s				
Crashes Density (per mile per year		4 0.09	1 0.02		-					
Rate (per MVM		0.42	0.02							

						All the same of th				
	Value	Critical	Road							
ADT Range		150≤ADT≤500	Ruau							
RD Density	0.093	0.032	*							
Access Density		8.0								
Curve Critical Radius Density Edge Risk		0.084 2 or 3	*		WGS RI					
Edgo No.	_	2 01 0	***		N 48 2961400 W 97 5169150	ICRE				
Describe Proposed Safety Improvements										
	Description	Туре	Cost per mi	Mileage	Cost	Notes - Qualifies for edge line rumble. Curve and intersection projects suggested				
	4" Edge Lines	Proactive	\$400	0.0	\$0	on other sheets.				
	6" Edge Lines	Proactive	\$650	8.6	\$5,590					
0	Edge Rumble Strip	Proactive Proactive	\$3,500	0.0	\$0					
Grou	nd In Wet-Reflective Markings Center Line Rumble Strip	Proactive Proactive	\$8,500 \$3,000	0.0	\$0 \$0					
	6" Center Line	Proactive	\$650	0.0	\$0					
				_		_				
Project Cost Estimate (attach detailed copy)				Propos	ed Year o	of Construction				
	Federal Funds	\$5,031								
Local Ma	tch (10% of Total project cost)	\$559	_							
	Total Project Cost	\$5,590								
NDDOT Central Office Only										
Project Accepted?	□Yes □No F	Reference Number	1			ID Number				
Notes	□ 163 □ 140	torororoo rtarribo.	Į.			15 Trained				
						Page: 2				
						Segment ID: 15.09				
						Date: 10/23/2013				

HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJE	CT APPLICATION									
North Dakota Department of Transportation Programming SFN 59959 (06-2011)	OT ALL LIGATION									
	h Avenue to Edinbu	rg west city limit (intersection with 5th Street)								
Agency Name: Walsh County Contact Name: Sharon Lipsh Email Address: slipsh@nd.gov	ND DOT Telephone	ND DOT District: 6 Telephone Number: 701-352-1530								
Please attach a location map(s). You may use additional sheets to further describe your projection Description	ect.									
Eccusion Description		SHSP Emphasis Area (check all that apply)								
Start: Intersection with 119th Avenu End: Edinburg west city limit (inters Facility Type: 2-Lane ADT: 440 Road Type Rural Paved County Road Walsh 9	Lane Width: 12' Speed Limit: High Shoulder Width: 0' Shoulder Type: None Length (miles): 10.0 Rumble Installed: No	Reduce Alcohol Impaired Driving Increase the Use of Safety Restraints for all Occupants Younger Driver/Older Driver Safety Curb Aggressive Driving Improvements to Address Lane Departure Crashes Enhancing Emergency Medical Capabilities to Increase Survivability Improve Intersection Safety								
Describe Current Safety Issues & Systemic Ranking Review North Dakota Crashes, 2008 - 2012	5 years									
Total Crashes 6 Density (per mile per year) 0.12 Rate (per MVM) 0.75	Road Dept K+A 2 0 0.04 0.00 0.25 0.00	Trick Constitution								
Value	Critical Road 150≤ADT≤500 ★ 0.032 ★ 8.0 0.084 2 or 3 ★ *****	Workers 2. d. Australian Valla Marketter								
Describe Proposed Safety Improvements										
Description 4" Edge Lines 6" Edge Lines Edge Rumble Strip Ground In Wet-Reflective Markings Center Line Rumble Strip 6" Center Line	Type Cost per m Proactive \$400 Proactive \$650 Proactive \$3,500 Proactive \$3,000 Proactive \$650	Mileage Cost Notes - Qualifies for edge line rumble. Curve projects suggested on other sheets. 10.0 \$4,000 0.0 \$0 0.								
Project Cost Estimate (attach detailed copy)		Proposed Year of Construction								
Federal Funds Local Match (10% of Total project cost) Total Project Cost	\$3,600 \$400 \$4,000									
NDDOT Central Office Only	Deference Number	IID Museher I								
Project Accepted?	Reference Number	ID Number								
		Page: 3 Segment ID: 9.03 Date: 10/23/2013								

HIGHWAY SAFETY IMPROVEMENT DRO	CDAM (USID) DDC IF	CT ADDI ICAT	ION		
HIGHWAY SAFETY IMPROVEMENT PRO North Dakota Department of Transportation Programmi		CI APPLICAT	ION		
SFN 59959 (06-2011)					
Walsh 12 fron	n Park River north	city limit (5-l	eg inter	rsectio	on) to Walsh / Pembina County Line
Agency Name:		5	ND DOT		
Contact Name:		Te	lephone N	lumber:	r: 701-352-1530
Email Address:					
Please attach a location map(s). You may use additional shee	ets to further describe your proje	ect.			
Location Description					SHSP Emphasis Area (check all that apply)
Start:	Park River north city limit (5-le	Lane Width:	12'		Reduce Alcohol Impaired Driving
	Walsh / Pembina County Line	Speed Limit:			
Facility Type: ADT:		Shoulder Width: Shoulder Type:			
Road Type	Rural Paved	Length (miles):	8.8	☑ I	Improvements to Address Lane Departure Crashes
County Road	Walsh 12	Rumble Installed:	No		
				"	improve intersection Salety
Describe Current Safety Issues & Systemic Ran	king Review				
North Dakota Crashes, 2008 - 2012		5	years		
	Total	Road Dept	K+A		SSOD America
Crashes	10	0	1	•	
Density (per mile per year) Rate (per MVM)	0.23 1.46	0.00 0.00	0.02 0.15		
reac (per wivin)	1.40	0.00	0.10	•	
	Value	Critical	Road		
ADT Range	426	150≤ADT≤500	*	•	
RD Density	0.000	0.032			
Access Density Curve Critical Radius Density	7.3 0.227	8.0 0.084	*		
Edge Risk	2	2 or 3	*	_	VidSA4
			***		SRE
Describe Proposed Safety Improvements					
	Description 4" Edge Lines	Type Proactive	Cost per mi \$400	Mileage 0.0	e Cost Notes - Curve projects suggested on other sheets.
	6" Edge Lines	Proactive	\$650	8.8	\$5,720
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0
Grour	d In Wet-Reflective Markings Center Line Rumble Strip	Proactive Proactive	\$8,500 \$3,000	0.0 0.0	\$0 \$0
	6" Center Line	Proactive	\$650	0.0	\$0
Project Coot Feliments (attack detailed cons)				Duanas	and Very of Compting tion
Project Cost Estimate (attach detailed copy)				Propose	sed Year of Construction
	Federal Funds	\$5,148			
Local Mat	ch (10% of Total project cost)	\$572			
	Total Project Cost	\$5,720			
NDDOT Central Office Only					
Project Accepted?	□Yes □No F	Reference Number			ID Number
Notes					
					Page: 4
					Segment ID: 12.14 Date: 10/23/2013
					Date. 10/23/2013

SFN 59959 (06-2011) Walsh 15 from I	ntersection with N	ID 32 to Pis	ek west	city lin	nit (inte	ersection with Sunset Avenue)
Agency Name: \ Contact Name: \ Email Address: \	Walsh County Sharon Lipsh slipsh@nd.gov		ND DOT Telephone I	District:	6	·
Please attach a location map(s). You may use additional shee Location Description	ts to further describe your proje	ect.				
	370 Rural Paved	Lane Width Speed Limi Shoulder Width Shoulder Typt Length (miles Rumble Installed	it: High h: 0' e: None i): 6.7		Increase th Younger Dr Curb Aggre Improveme Enhancing	SHSP Emphasis Area (check all that apply) cohol Impaired Driving e Use of Safety Restraints for all Occupants river/Older Driver Safety sssive Driving this to Address Lane Departure Crashes Emergency Medical Capabilities to Increase Survivability ersection Safety
Describe Current Safety Issues & Systemic Rand	king Review		_			
North Dakota Crashes, 2008 - 2012			5 years		- Distinh	Name of the last o
Crashes Density (per mile per year) Rate (per MVM)	Total 4 0.12 0.88	Road Dept 3 0.09 0.66	K+A 1 0.03 0.22	<u>-</u>		
ADT Range RD Density Access Density Curve Critical Radius Density Edge Risk	Value 370 0.089 7.4 0.000 2	Critical 150≤ADT≤500 0.032 8.0 0.084 2 or 3	Road * * *	-	WG5-84 N 48.3107667 W 97 7681533	SRE
Describe Proposed Safety Improvements						
- Groun -	Description 4" Edge Lines 6" Edge Lines Edge Rumble Strip d In Wet-Reflective Markings Center Line Rumble Strip 6" Center Line	Type Proactive Proactive Proactive Proactive Proactive Proactive	Cost per mi \$400 \$650 \$3,500 \$8,500 \$3,000 \$650	Mileage 6.7 0.0 0.0 0.0 0.0 0.0	Cost \$2,680 \$0 \$0 \$0 \$0 \$0	Notes - Qualifies for edge line rumble. Intersection projects suggested on other sheets.
Project Cost Estimate (attach detailed copy)				Propose	ed Year o	f Construction
Local Mate	Federal Funds h (10% of Total project cost) Total Project Cost	\$2,412 \$268 \$2,680	_	•		
NDDOT Central Office Only		Oforongo Numbor				IID Number
Project Accepted? Notes	□Yes □No R	Reference Number	I			[ID Number

HIGHWAY SAFETY IMPROVEM			ROJECT APPLICA	TION							
North Dakota Department of Transportation SFN 59959 (06-2011)	on Programmino										
Con		/alsh County haron Lipsh lipsh@nd.gov		vel secti ND DOT Telephone N	District:	6		on			
Location Description			. ,				0110	25 1 . 4	(1 1 1111 1		
	End: En Facility Type: 2- ADT: 26 Road Type R County Road W	60 ural Paved /alsh 12B	Lane Width Speed Limit Shoulder Width Shoulder Type Length (miles) Rumble Installed	: High : 0' :: None : 1.4		Increase the Younger Dr Curb Aggre Improveme Enhancing	ohol Impaired I e Use of Safety iver/Older Drive ssive Driving nts to Address	Restraints for all er Safety Lane Departure (dical Capabilities)	Occupants Crashes	,	
Describe Current Safety Issues & Sy North Dakota Crashes, 2008 - 2012	/stemic Rank	ing Review		Fueere							
Density (per	Crashes mile per year) ate (per MVM)	Total 2 0.29 3.01	Road Dept 1 0.14 1.51	K+A 0 0.00 0.00		Weigh 1010 America Parelle		oss. Pe	GHERWALL		
A Curve Critical F	ADT Range RD Density ccess Density Radius Density Edge Risk	Value 260 0.146 6.6 0.000 2	Critical 150≤ADT≤500 0.032 8.0 0.084 2 or 3	Road * * * *		WGS-54 N 48 2705567 W 97.7955883	174		ISRF		
Describe Proposed Safety Improven	nents										
	Ground	Descr 4" Edge 6" Edge Edge Rumble In Wet-Reflective Mar Center Line Rumble 6" Cente	Lines Proactive Lines Proactive 2 Strip Proactive rkings Proactive 2 Strip Proactive	Cost per mi \$400 \$650 \$3,500 \$8,500 \$3,000 \$650	Mileage 1.4 0.0 0.0 0.0 0.0 0.0	Cost \$560 \$0 \$0 \$0 \$0 \$0 \$0	_Notes -				
Project Cost Estimate (attach detaile	ed copy)				Propose	ed Year o	f Constructi	on			
,		Federal I (10% of Total project Total Project	cost) \$56	_							
NDDOT Central Office Only	Tr		ID-f Number				IID Moselese				
Project Accepted? Notes]Yes □ No	Reference Number				ID Number	Dage		6	
							Se	Page: egment ID: Date:		6 12.04 10/23/2013	

HIGHWAY SAFETY IMPROVE			(HSIP) PROJE	CT APPLICAT	ION							
North Dakota Department of Transports SFN 59959 (06-2011)												
,			19 from Inte	ersection wit				west city	limit			
C	Agency Name: V Contact Name: S mail Address: s	Sharon	Lipsh	Т	ND DOT I elephone N			530				
Please attach a location map(s). You may u	use additional sheet	s to furth	ner describe your proj	ect.								
Location Description								SHSE	Emphasis Area	(check all tha	it annly)	
	End: F Facility Type: 2 ADT: 4 Road Type F County Road V	Fordville v P-Lane 110 Rural Pav Valsh 19		Lane Width: Speed Limit: Shoulder Width: Shoulder Type: Length (miles): Rumble Installed:	High 2' Paved 2.5		Increase the Younger Dri Curb Aggres Improvemer Enhancing I	ohol Impaired D to Use of Safety ever/Older Drive ssive Driving onts to Address L	Priving Restraints for all r Safety ane Departure (dical Capabilities	Occupants Crashes		
Describe Current Safety Issues &	Systemic Rank	ring Re	eview									
North Dakota Crashes, 2008 - 2012 Density (Crashes per mile per year) Rate (per MVM)		Total 5 0.40 2.67	Road Dept 1 0.08 0.53	K+A 0 0.00 0.00		Weist With Street West	Raino	ossu.pg	EHERMISEL		
	ADT Range RD Density Access Density al Radius Density Edge Risk		Value 410 0.079 7.1 1.190	Critical 150≤ADT≤500 0.032 8.0 0.084 2 or 3	Road * * *		WGS:51 N°18-2165257 W 37 1206950	1	-	SRE		
Describe Proposed Safety Improv	rements											
	Ground		Description 4" Edge Lines 6" Edge Lines Edge Rumble Strip Reflective Markings er Line Rumble Strip 6" Center Line	Type Proactive Proactive Proactive Proactive Proactive Proactive	Cost per mi \$400 \$650 \$3,500 \$8,500 \$3,000 \$650	0.0 2.5 0.0 0.0 0.0 0.0	Cost \$0 \$1,625 \$0 \$0 \$0 \$0	Notes - Qualifi	es for edge line	rumble.		
Project Cost Estimate (attach deta	ailed copy)					Propose	ed Year of	f Construction	on			
1 Tojou oou <u>Louman</u> jundon dan	11,		Federal Funds of Total project cost) otal Project Cost	\$1,463 \$163 \$1,625	-	Торосс	ou rour or	Concaraca	<i></i>			
NDDOT Central Office Only												
Project Accepted? Notes		Yes	□No	Reference Number				ID Number				
								Se	Page: gment ID: Date:		7 19.03 10/23/201	3

HIGHWAY SAFETY IMPROV			(HSIP) PROJE	ECT APPLICAT	ΓΙΟΝ					
North Dakota Department of Transport SFN 59959 (06-2011)	tation Programmi	•	l. 0 for any local		1. 011.00	4 - 1 - 4			1.40	
	Agency Name:			ersection wit	ND DOT			on with SF	1 18	
	Contact Name: Email Address:	Sharon	Lipsh	Т	elephone N		-	1530		
Please attach a location map(s). You may				ject.						
Location Description						ı		euen	Emphasis Area (check all that apply	A
	End: Facility Type: ADT: Road Type County Road	Intersecti 2-Lane 353 Rural Pav Walsh 9		Lane Width: Speed Limit: Shoulder Width: Shoulder Type: Length (miles): Rumble Installed:	: High : 2' : Paved : 11.1		Increase th Younger Do Curb Aggree Improveme Enhancing	cohol Impaired Dr ne Use of Safety F river/Older Driver essive Driving ents to Address La	riving Restraints for all Occupants	
Describe Current Safety Issues & North Dakota Crashes, 2008 - 2012	& Systemic Ran	king Re	eview	5	years					
·	Crashes (per mile per year)		Total 12 0.22	Road Dept 4 0.07	K+A 0 0.00		Whiteh B Wast	Name o	Drizment.	
	Rate (per MVM)		1.68	0.56	0.00	•				
	ADT Range		Value 353	Critical 150≤ADT≤500	Road ★		-		-	
	RD Density Access Density		0.072 6.7	0.032	*				THE RESIDENCE	
Curve Critic	cal Radius Density Edge Risk		0.271 1	0.084 2 or 3	*		WGS-64			
					***		W 97 8096483		SRF	
Describe Proposed Safety Impro	vements									
			Description	Туре	Cost per mi	Mileage	Cost	Notes - Qualifie	es for edge line rumble. Curve and in	tersection projects suggested
	•		4" Edge Lines 6" Edge Lines	Proactive Proactive	\$400 \$650	11.1 0.0	\$4,440 \$0	on other sheets	3.	
			Edge Rumble Strip	Proactive	\$3,500	0.0	\$0			
	Groun		Reflective Markings er Line Rumble Strip	Proactive Proactive	\$8,500 \$3,000	0.0	\$0 \$0			
	-		6" Center Line	Proactive	\$650	0.0	\$0	_		
Project Cost Estimate (attach det	tailed copy)					Propose	ed Year o	of Construction	n	
			Federal Funds	\$3,996						
	Local Mate		f Total project cost)	\$444	_					
		1	otal Project Cost	\$4,440						
NDDOT Central Office Only		_		5 /				IID N		
Project Accepted? Notes		Yes	□No	Reference Number				ID Number		
								Seg	Page: ment ID: Date: 10	8 9.08 //23/2013

LUCUWAY OA FETY INDDOVEMENT DDO	ODAM (HOID) DDO IS	-OT ADDI 10 A	FIGN			
HIGHWAY SAFETY IMPROVEMENT PRO North Dakota Department of Transportation Programm SFN 59959 (06-2011)		CI APPLICA	IION			
Walsh 12B from Walsh/Grand F	Walsh County Sharon Lipsh slipsh@nd.gov	т	SOUth Ci ND DOT elephone I	District:	6	section with 55th Street that tees in from east)
Location Description						
End: Facility Type: ADT: Road Type County Road	340 Rural Paved Walsh 12B	Lane Width: Speed Limit Shoulder Width: Shoulder Type Length (miles): Rumble Installed	: Low : 2' : Paved : 1.0		Increase th Younger Do Curb Aggre Improveme Enhancing	SHSP Emphasis Area (check all that apply) cohol Impaired Driving the Use of Safety Restraints for all Occupants river/Older Driver Safety assive Driving that to Address Lane Departure Crashes Emergency Medical Capabilities to Increase Survivability tersection Safety
Describe Current Safety Issues & Systemic Rar North Dakota Crashes, 2008 - 2012	nking Review	F	years			
			-		Weigh	NINGOLTOPG CHANGE
Crashes	Total 6	Road Dept 1	K+A 0	-	Horth	
Density (per mile per year)	1.20	0.20	0.00			
Rate (per MVM)	9.67	1.61	0.00	-		
	Value	Critical	Road	_	Mark Mark	The state of the s
ADT Range RD Density		150≤ADT≤500 0.032	*			THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW
Access Density	11.0	8.0	*			
Curve Critical Radius Density Edge Risk	0.000 1	0.084 2 or 3			WGS-64	
Edge Nok	· · · · · · · · · · · · · · · · · · ·	2010	***	•	N 48 15980 7 W 97 795303	SRE
Describe Proposed Safety Improvements						
Decombe i repecce durety improvemente						
	Description	Туре	Cost per mi		Cost	Notes - Qualifies for edge line rumble.
	4" Edge Lines 6" Edge Lines	Proactive Proactive	\$400 \$650	1.0 0.0	\$400 \$0	
	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Groun	nd In Wet-Reflective Markings Center Line Rumble Strip	Proactive Proactive	\$8,500 \$3,000	0.0	\$0 \$0	
	6" Center Line	Proactive	\$650	0.0	\$0	
Project Cost Estimate (attach detailed copy)				Pronose	nd Voor o	of Construction
Troject Gost Estimate (attach detailed Gopy)				l	ou rear o	n construction
Local Mo	Federal Funds tch (10% of Total project cost)	\$360 \$40				
Localivia	Total Project Cost	\$400	_			
NDDOT O						
NDDOT Central Office Only Project Accepted?	☐ Yes ☐ No	Reference Number	T T			IID Number
Notes						<u> </u>
						Page: 9
						Segment ID: 12.01 Date: 10/23/2013

HIGHWAY SAFETY IMPROVEMENT PRO North Dakota Department of Transportation Programm		CT APPLICAT	TION			
SFN 59959 (06-2011)						
		County Roa				End pavement / begin gravel
Agency Name: Contact Name:	Walsh County	т	ND DOT elephone N			1530
	slipsh@nd.gov	•	elepilolie i	vuilibei.	701-332-	1330
Please attach a location map(s). You may use additional she		ect.				
Location Description						
Stort	Intersection with County Roac	Lane Width:	12'		Peduce Alc	SHSP Emphasis Area (check all that apply) cohol Impaired Driving
	End pavement / begin gravel	Speed Limit:	High		Increase the	e Use of Safety Restraints for all Occupants
Facility Type:		Shoulder Width:				river/Older Driver Safety
ADT: Road Type	281 Rural Paved	Shoulder Type: Length (miles):				essive Driving ints to Address Lane Departure Crashes
County Road		Rumble Installed:			Enhancing	Emergency Medical Capabilities to Increase Survivability
					Improve Inte	ersection Safety
Describe Current Safety Issues & Systemic Rai	nking Review					
North Dakota Crashes, 2008 - 2012		5	years			
	Total	Road Dept	K+A		States 1989: Awares	POSICIONAPO CHOMANA
Crashes	2	0	0		Part I	
Density (per mile per year) Rate (per MVM)	0.09 0.87	0.00 0.00	0.00 0.00			
rtate (per ivitivity)	0.07	0.00	0.00	-		
	Value	Critical	Road			
ADT Range		150≤ADT≤500	*	•	1000000	Miles and the second
RD Density		0.032	_			THE RESERVE OF THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TRANSPORT OF THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW
Access Density Curve Critical Radius Density	1.114	8.0 0.084	*			
Edge Risk		2 or 3		-	WGS-84	
			***		W-07 7995111	SRF
Describe Proposed Safety Improvements						
		_				
	Description 4" Edge Lines	Type Proactive	Cost per mi \$400	Mileage 4.5	\$1,800	Notes - Qualifies for edge line rumble. Curve and intersection projects suggested on other sheets.
	6" Edge Lines	Proactive	\$650	0.0	\$0	
0	Edge Rumble Strip	Proactive	\$3,500	0.0	\$0	
Grou	nd In Wet-Reflective Markings Center Line Rumble Strip	Proactive Proactive	\$8,500 \$3,000	0.0	\$0 \$0	
	6" Center Line	Proactive	\$650	0.0	\$0	=
Project Cost Estimate (attach detailed copy)				Propose	ed Year o	f Construction
· · · · · · · · · · · · · · · · · · ·						
Local Mo	Federal Funds tch (10% of Total project cost)	\$1,620 \$180				
Local Ma	Total Project Cost	\$1,800	_			
		. ,				
NDDOT Central Office Only Project Accepted?	☐Yes ☐No F	Reference Number	T			ID Number
Notes	☐ Yes ☐ No	vererence ivumber				ID Number
						Davis (2)
						Page: 10 Segment ID: 4.05
						Date: 10/23/2013

SFN 59959 (06-2011)						
		on after curv				End pavement / begin gravel
Agency Name: Wal		_	ND DOT			
Contact Name: Sha		Te	elephone N	lumber:	701-352-1	530
Email Address: slip Please attach a location map(s). You may use additional sheets to		act				
Location Description	Tartifer describe your proje	, oc.				
•						SHSP Emphasis Area (check all that apply)
	n tangent section after cu pavement / begin gravel	Lane Width: Speed Limit:				phol Impaired Driving Use of Safety Restraints for all Occupants
Facility Type: 2-La		Shoulder Width:			Younger Dri	ver/Older Driver Safety
ADT: 275		Shoulder Type:				ssive Driving
Road Type Rura County Road Wals		Length (miles): Rumble Installed:		V	Improvemer Enhancing E	nts to Address Lane Departure Crashes Emergency Medical Capabilities to Increase Survivability
,						ersection Safety
Describe Current Safatu lacuae & Suatarria Dankin	n Daview					
Describe Current Safety Issues & Systemic Ranking North Dakota Crashes, 2008 - 2012	y neview	5	years			
					(Espesia)	Minimax, Fee (Manual)
Crashes	Total 1	Road Dept	K+A 0		Charles	
Density (per mile per year)	0.11	0.11	0.00			
Rate (per MVM)	1.05	1.05	0.00		-	
ADT December	Value 275	Critical 150≤ADT≤500	Road			
ADT Range RD Density	275 0.107	0.032	*		200	A COLUMN TO THE PARTY OF THE PA
Access Density	10.2	8.0	*			
Curve Critical Radius Density Edge Risk	0.000 1	0.084 2 or 3			WGS 84	
Edge Nisk		2 01 0	***		N 38 3010700- W 97 5573167	SRE
Describe Proposed Safety Improvements						
Describe Proposed Sarety Improvements						
	Description	Туре	Cost per mi		Cost	Notes - Qualifies for edge line rumble.
	4" Edge Lines	Proactive	\$400	0.0	\$0	
	6" Edge Lines Edge Rumble Strip	Proactive Proactive	\$650 \$3,500	1.9 0.0	\$1,235 \$0	
	Wet-Reflective Markings	Proactive	\$8,500	0.0	\$0	
	Center Line Rumble Strip 6" Center Line	Proactive Proactive	\$3,000 \$650	0.0	\$0 \$0	
	0 Center Line	Tioactive	ΨΟΟΟ	0.0	ΨΟ	-
Project Cost Estimate (attach detailed copy)				Propose	ed Year of	Construction
	- · · · ·	\$1,112				
	Federal Funds	Ψ1,112				
Local Match (1	Federal Funds 0% of Total project cost)	\$124				
Local Match (1		\$124 \$1,235	-			
	0% of Total project cost)					
NDDOT Central Office Only	0% of Total project cost) Total Project Cost					ID Number
NDDOT Central Office Only	0% of Total project cost) Total Project Cost	\$1,235	- I			ID Number
NDDOT Central Office Only	0% of Total project cost) Total Project Cost	\$1,235				ID Number
NDDOT Central Office Only	0% of Total project cost) Total Project Cost	\$1,235				ID Number
NDDOT Central Office Only	0% of Total project cost) Total Project Cost	\$1,235				ID Number
NDDOT Central Office Only	0% of Total project cost) Total Project Cost	\$1,235				ID Number
NDDOT Central Office Only	0% of Total project cost) Total Project Cost	\$1,235				ID Number
NDDOT Central Office Only	0% of Total project cost) Total Project Cost	\$1,235	- 			
NDDOT Central Office Only	0% of Total project cost) Total Project Cost	\$1,235				ID Number

Walsh County Curves

										Crashes								
Curve Count	ID	Corridor	Segment	Start	End	Curve Advisory Sign	Speed Advisory Sign	Chevrons	Total	Total Severe K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	Speed Limit	Risk Ranking	Notes
1	004A	4.05	Walsh 4	Intersection with County Road 11 / 70th Street	End pavement / begin gravel	Yes	Yes	Yes	-		-	1200	281	Yes	No	High	**	Seems to be only one chevron; in the northbound direction
2	004B	4.05	Walsh 4	Intersection with County Road 11 / 70th Street	End pavement / begin gravel	Yes	Yes	Yes	-		-	1400	281	No	No	High		
3	004C	4.05	Walsh 4	Intersection with County Road 11 / 70th Street	End pavement / begin gravel	Yes	Yes	No	-		-	1500	281	No	No	High		
4	004D	4.05	Walsh 4	Intersection with County Road 11 / 70th Street	End pavement / begin gravel	No	No	No	-		-	1300	281	No	Yes	High	*	
5	004E	4.05	Walsh 4	Intersection with County Road 11 / 70th Street	End pavement / begin gravel	No	No	No	-		-	260	281	No	Yes	High	*	
7	009A	9.03	Walsh 9	Intersection with 119th Avenue	Edinburg west city limit (intersection with 5th Street)	Yes	Yes	Yes	-		-	1330	440	No	No	High	*	
8	009B	9.03	Walsh 9	Intersection with 119th Avenue	Edinburg west city limit (intersection with 5th Street)	Yes	Yes	Yes	-		-	1350	440	Yes	Yes	High	***	
9	009D	9.08	Walsh 9	Intersection with SH 32	Intersection with SH 18	Yes	Yes	Yes	1		-	550	353	No	No	High	**	
10	009E	9.08	Walsh 9	Intersection with SH 32	Intersection with SH 18	Yes	Yes	Yes	-			300	353	Yes	Yes	High	***	
11	009F	9.08	Walsh 9	Intersection with SH 32	Intersection with SH 18	Yes	Yes	Yes	-		-	650	353	Yes	No	High	***	
12	012A	12.14	Walsh 12	Park River north city limit (5-leg intersection)	Walsh / Pembina County Line	Yes	No	No	-		-	1150	426	Yes	Yes	Low	****	
13	012B	12.14	Walsh 12	Park River north city limit (5-leg intersection)	Walsh / Pembina County Line	Yes	No	No	1		-	1200	426	Yes	Yes	Low	****	
14	012F	12.05	Walsh 12B	End gravel section	Begin gravel section	Yes	No	Yes	1		-	990	120	No	No	Low	*	
15	012G	12.05	Walsh 12B	End gravel section	Begin gravel section	Yes	No	Yes	-		-	740	120	Yes	No	Low	**	
16	012H	12.05	Walsh 12B	End gravel section	Begin gravel section	Yes	No	No	-			730	120	No	No	Low	*	
17	0121	12.05	Walsh 12B	End gravel section	Begin gravel section	Yes	No	Yes	-			800	120	No	No	Low	*	
18	015A	15.09	Walsh 15	Curve from 142nd Avenue	Intersection with US 81	No	No	Yes	2	1 -	- 1	960	611	Yes	Yes	High	****	
19	019A	19.03	Walsh 19	Intersection with ND 32	Fordville west city limit	Yes	No	No	-		-	1800	410	No	No	High	*	
20	019B	19.03	Walsh 19	Intersection with ND 32	Fordville west city limit	Yes	No	No	-		-	2800	410	Yes	No	High	**	
21	019C	19.03	Walsh 19	Intersection with ND 32	Fordville west city limit	Yes	No	No	-		-	4000	410	No	No	High	*	
22	019E	19.05	Walsh 19	Fordville east city limit	End of second horizontal curve	Yes	No	Yes	-		-	1390	250	Yes	Yes	High	**	
23	019F	19.05	Walsh 19	Fordville east city limit	End of second horizontal curve	Yes	No	Yes	-		-	1440	250	Yes	Yes	High	**	

	Total	
Stars	#	%
****	1	5%
****	2	9%
***	3	14%
**	6	27%
*	8	36%
	2	9%
	22	100%

SFN 59959 (0	С	urve	Agen Conta Email	cy Name: ct Name: Address:	Walsh Coun Sharon Lips slipsh@nd.g	ty h jov			oad 11 / 70		to End pave ND DOT District: ephone Number:	: 6	_	
			ap(s). You may (Corridor C		al sheets to fur Curves)	ther describ	e your proje	ect.						
End Facility Type	: End p : 2-Lar : 281 e Rura	oavem ne Pave	with County R ent / begin gra		Show Show Len	ane Width: speed Limit: ulder Width: ulder Type: gth (miles): le Installed:	High 2' Paved 4.5				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints or Driver Safety ving dress Lane Depa cy Medical Capa	for all Occupar	
				& Systemi	c Ranking R									
North Dakota Curve ID 004A	Crashe K 0	A 0	Radius (ft)	ADT 281	Intersection on Curve Yes	Visual Trap No	Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project Chevron	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque Inspect Curve
004A 004B 004C 004D 004E	0 0 0 0	0 0 0 0	1400 1500 1300 260	281 281 281 281 281	No No No No	No No Yes Yes	* *	x x x x	- - -	Chevron Chevron Chevron Chevron] :	- -	- X - X	Inspect Curve Inspect Curve Inspect Curve
*Curve numb Ranking C			secutive, as son	S	evere Crashes Radius ADT ction on Curve	Criteria > 0 500 to 1200 350 to 650 Yes		Curves are so	ty or Existing Che	et if:	vel road, etc			
					Visual Trap	Yes								
	•		_	e Warning Si	Arrow gn/Speed Advis Shoulder R Shou	Board Only	Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 5 0 3 .0 miles .0 miles	Total cost \$16,500 \$0 \$2,400 \$0 \$0 \$18,900	Notes - Segmer suggested on or		on projects
Project Co	st Es	timat	e (attach de	tailed cop	y)					Proposed Y	ear of Construct	ion		
				Local Match	(10% of Total p	deral Funds project cost) pject Cost	\$1,890	-						
NDDOT Ce Project Accep		Offic	e Only	No		Reference	Number				ID Number			
Notes	.ou :		<u> 1103 11</u>			Keierence	, MATHOET	ı			ramber	1		
													Page Segment ID Date	

HIGHWAY	/ SAI	FT\	/ IMPROV	/EMENT I	PROGRAM	(HSID)	PRO IF	T ADDI I	CATION					
North Dakota SFN 59959 (06	Depa	rtmen				(11317)	FROJE	OI AFFLI	CATION					
			Agen Conta Email	cy Name: act Name: Address:	Walsh Count Sharon Lipsl slipsh@nd.g	ty h ov			to Edinbu		ty limit (inter ND DOT District: ephone Number:	: 6		reet)
Please attach a Location De					al sheets to furt	her describe	e your proje	ect.						
Start: End: Facility Type: ADT: Road Type County Road	Interse Edinb 2-Lan 440 Rural Walsh	ection urg we e Paved	with 119th Av st city limit (in	renue ntersection w	L Sj Shou Shoi Lenç Rumbl	ane Width: peed Limit: Ider Width: ulder Type: gth (miles): e Installed:	High 0' None 10.0				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emerger Improve Intersection	Safety Restraints or Driver Safety ving dress Lane Depa cy Medical Capal	for all Occupan	
Describe Co				& Systemic	c Ranking Re		voore							
Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
009A 009B	0	0	1330 1350	440 440	No Yes	No Yes	***	X X	-	Chevron Chevron	-	-	-	-
"Curve numbe Ranking Cr		t cons	ecutive, as so	S	evere Crashes Radius 5	Criteria > 0 500 to 1200 350 to 650 Yes Yes	n further an:	Curves are so	ty or Existing Che	et if:	vel road, etc			
Describe Pi	ropos	ed S	afety Impro	ovements										
			Advand	ce Warning Si	Arrow E gn/Speed Advis Shoulder Ru		Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 2 0 0 0 .0 miles .0 miles	Total cost \$6,600 \$0 \$0 \$0 \$0 \$0	Notes - Segmer sheets.	nt projects sugge	ested on other
Project Cos	st Est	imate	(attach de	etailed cop	y)					Proposed Yo	ear of Construct	ion		
				Local Match	(10% of Total p	leral Funds roject cost) ject Cost	\$660							
NDDOT Cel Project Accept		Office		l No		Reference	Number				ID Number			
Notes	ou:		_ 163			A COLOR CHILD	, MAINING!				ne municel	1		
													Page Segment ID Date	

Email Address: slipsh@nd.gov Please attach a location map(s). You may use additional sheets to further describe your project. Location Description (Corridor Containing Curves) SHSP E Start: Intersection with SH 32	strict: 6 mber: 701-352-15 imphasis Area (check not Impaired Driving Use of Safety Restrai er/Older Driver Safety ive Driving is to Address Lane Denergency Medical Casection Safety Shoulder aving Rumble Stri	Advance Horizontal	
Start: Intersection with SH 32 Lane Width: 12' Reduce Alcoh Start: Intersection with SH 32 Lane Width: 12'	nol Impaired Driving Use of Safety Restrai er/Older Driver Safety ive Driving s to Address Lane De mergency Medical Ca section Safety Shoulder aving Rumble Stri t Project	Advance Horizontal Alignment Warning Sign X X	Advisory Speed Plaque 40 35
Start: Intersection with SH 32	nol Impaired Driving Use of Safety Restrai er/Older Driver Safety ive Driving s to Address Lane De mergency Medical Ca section Safety Shoulder aving Rumble Stri t Project	Advance Horizontal Alignment Warning Sign X X	Advisory Speed Plaque 40 35
North Dakota Crashes, 2008 - 2012 5 years Proximity or High Priority Sign Proximity or High Priority Sign Lintersection Visual Risk Existing Segment + Improvement Shoulder Parameter Curve ID K A Radius (ft) ADT on Curve Trap Ranking Chevrons Critical Radius Project Project Project 009D 0 0 550 353 No No ** X X Chevron - 009E 0 0 300 353 Yes Yes *** X - Chevron -	aving Rumble Stri t Project	Horizontal ip Alignment Warning Sign x x	Plaque 40 35
Curve ID K A Radius (ft) ADT Intersection on Curve Trap on Curve Ranking of Chevrons Chevrons of Critical Radius Project Projec	aving Rumble Stri t Project	Horizontal ip Alignment Warning Sign x x	Plaque 40 35
009E 0 0 300 <mark>353 Yes Yes</mark> *** x - Chevron -	-	x	35
*Curve numbering not consecutive, as some curves may have been removed from further analysis because a large radius, located on a gravel road, etc **Ranking Criteria** Criteria Curves are selected for project if: Severe Crashes > 0 -3 or more *s Radius 500 to 1200 -x in Proximity or Existing Chevron column ADT 350 to 650 Intersection on Curve Yes Visual Trap Yes			
Describe Proposed Safety Improvements			
Description Type Unit Cost Quantity Total cost	Notes - Segn suggested or	ment and intersection n other sheets.	n projects
Project Cost Estimate (attach detailed copy) Proposed Year of Cons			
Federal Funds \$11,070 Local Match (10% of Total project cost) \$1,230 Total Project Cost \$12,300			
NDDOT Central Office Only			
Project Accepted?			
		Page: Segment ID: Date:	

SFN 59959 (0	Cı	irve	Agen Conta Email	cy Name: act Name: Address:	Walsh County Sharon Lipsh slipsh@nd.go	v v			5-leg inter	•	to Walsh / Pe ND DOT District: ephone Number:	6	-	
			ap(s). You may (Corridor (nal sheets to further Curves)	er describ	e your proje	ect.						
Start End Facility Type	: Park : Wals : 2-Lar : 426 : Rural	River i h / Per ne	north city limit	(5-leg interse	Lai Spe Should Should Lengt	ne Width: eed Limit: ler Width: der Type: h (miles): Installed:	Low 2' None 8.8				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emergen Improve Intersection	Safety Restraints or Driver Safety ving dress Lane Depa cy Medical Capa	for all Occupan	
				& Systemi	c Ranking Rev									
North Dakota Curve ID	K	Α	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
012A 012B	0	0	1150 1200	426 426	Yes Yes	Yes Yes	****	-	X X	Chevron Chevron	-	-	x x	-
"Curve numbe Ranking C i			secutive, as so	S	evere Crashes Radius 50	riteria > 0		Curves are se	elected for projects s ty or Existing Che	ct if:	vel road, etc			
Describe P	ropo	sed S	afety Impro	ovements										
			Advand	ce Warning Si	(Arrow Bo ign/Speed Advisor Shoulder Run	oard Only ry Plaque nble Strip	Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 2 0 2 .0 miles .0 miles	Total cost \$6,600 \$0 \$1,600 \$0 \$0 \$8,200	Notes - Segmer sheets.	nt projects sugge	ested on other
Project Co.	st Es	timat	e (attach de	etailed cop	y)					Proposed Y	ear of Construct	ion		
				Local Match	Feder (10% of Total pro Total Proje		\$820	-						
NDDOT Ce Project Accep		Offic		No		Reference	Number	ı			ID Number			
Notes	.ou:		<u> </u>			. Coronello	, Mailling!	1			po Municol	ı		
													Page Segment ID Date	

North Dakota SFN 59959 (0						lsh 12E	3 from	End grav	el section	n to Begin	gravel secti	on		
			Conta	ct Name	: Walsh Count : Sharon Lipsl : slipsh@nd.g	h					ND DOT District: ephone Number:		0	
Please attach Location D					onal sheets to furt	her describ	e your proje	ect.						
Start End Facility Type	: End g : Begin : 2-Lan : 120 e Rural	ravel s gravel e Paved	ection I section	omanni	L Sj Shou Shoi Lene	ane Width: peed Limit: Ider Width: ulder Type: gth (miles): e Installed:	Low 2' Paved 0.9				SHSP Emphas Reduce Alcohol Imp Increase the Use of Younger Driver/Olde Curb Aggressive Dri Improvements to Ad Enhancing Emergen Improve Intersection	Safety Restraints or Driver Safety ving dress Lane Depa cy Medical Capa	for all Occupar	
				& Systen	nic Ranking Re					•				
North Dakota Curve ID	K	A	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
012F 012G 012H 012I	0 0 0 0	0 0 0 0	990 740 730 800	120 120 120 120	No Yes No No	No No No No	* ** *	X X X	x x x x	Chevron Chevron Chevron	- - -	- - -	x x x x	50 45 45 45
Ranking C	riteria				Severe Crashes Radius 5	Criteria > 0 500 to 1200 350 to 650 Yes		- 3 or more ★	y or Existing Ch					
				inters	Visual Trap	Yes								
Describe P	ropos	ed S	afety Impro	vements										
			- Advand	e Warning	Arrow I Sign/Speed Advis Shoulder Ru	Board Only ory Plaque	Proactive Proactive Proactive Proactive	\$500		Quantity 4 0 4 .0 miles .0 miles	Total cost \$13,200 \$0 \$3,200 \$0 \$0 \$16,400	Notes -		
Project Co.	st Est	imate	e (attach de	tailed co	ру)					Proposed You	ear of Construct	ion		
				Local Mate	Fed th (10% of Total p Total Pro		\$1,640	-						
NDDOT Ce					•	D (lib N			
Project Accep Notes	ted?		Yes	No		Reference	e Number				ID Number			
													Page Segment ID Date	

HIGHWAY SAFE				(HSIP)	PROJE	CT APPLI	CATION					
North Dakota Departr SFN 59959 (06-2011)	Aç Co Em	Curves gency Name entact Name	on Walsh 15 e: Walsh County e: Sharon Lipsh e: slipsh@nd.go	y 1 DV			2nd Aver		rsection with ND DOT District ephone Number	: 6	0	
Please attach a location Location Descript				ier describ	e your proje	ect.						
Start: Curve for End: Intersec Facility Type: 2-Lane ADT: 611 Road Type Rural Pa County Road Walsh 1	tion with US 8		Sp Should Shou Leng	ane Width: beed Limit: der Width: llder Type: tth (miles): e Installed:	High 2' None 8.6				SHSP Empha: Reduce Alcohol Imp Increase the Use of Younger Driver/Olds Curb Aggressive Dr Improvements to Ac Enhancing Emerger Improve Intersection	Safety Restraints er Driver Safety iving Idress Lane Depa ncy Medical Capa	s for all Occupar	
Describe Current		es & Syster	nic Ranking Re									
North Dakota Crashes, Curve ID K	2008 - 2012 A Radius (ft) ADT	Intersection on Curve	5 Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius	Sign Improvement Project	Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
015A 0	1 960	611	Yes	Yes	****	Х	X	Chevron	-	-	х	50
*Curve numbering not of Ranking Criteria		Inter	Severe Crashes Radius 50 ADT 3 section on Curve Visual Trap	riteria > 0 00 to 1200 350 to 650 Yes Yes		Curves are se	elected for projers ty or Existing Ch	ect if:	vel road, etc			
			D	escription	Type	Unit Cost		Quantity	Total cost			
	Adv	vance Warning	Arrow B Sign/Speed Adviso Shoulder Ru	Chevrons Board Only ory Plaque	Proactive Proactive Proactive Proactive	\$3,300 \$500 \$800	per curve per curve per curve per mile per mile	1 0 1 .0 miles	\$3,300 \$0 \$800 \$0 \$0	Notes - Segmer suggested on o		on projects
Project Cost Estin	nate (attach	n detailed co	opv)					Proposed Y	\$4,100 ear of Construct	ion		
					\$410	-						
NDDOT Central Of	ffice Only											
Project Accepted?	Yes	□No		Reference	Number				ID Number			
Notes												
											Page Segment IE Date	

North Dakota D	epartr				PROGRAM gramming	I (HSIP)	PROJE	CI APPLI	CATION					
	location		Agen Conta Email (s). You may	cy Name act Name Address y use addition	: Walsh Coun : Sharon Lips : slipsh@nd.g onal sheets to furt	ty h jov			y limit to		cond horizor ND DOT District: ephone Number:	6	0	
Location Des	script	ion (Corridor (Containin	g Curves)					T	SHSP Emphas	is Area (check al	I that apply)	
	ind of s -Lane 50 Rural Pa	secono aved	city limit d horizontal	curve	S Shou Sho Len	ane Width: speed Limit: alder Width: ulder Type: gth (miles): le Installed:	High 2' Paved 1.0				Reduce Alcohol Implementation of the Vounger Driver/Olde Curb Aggressive Dri Improvements to Adenhancing Emergen Improve Intersection	aired Driving Safety Restraints or Driver Safety ving dress Lane Depa cy Medical Capal	for all Occupar	
				& Systen	nic Ranking R									
	K	A I	Radius (ft)	ADT	Intersection on Curve	Visual Trap	years Risk Ranking	Proximity or Existing Chevrons	High Priority Segment + Critical Radius		Shoulder Paving Project	Shoulder Rumble Strip Project	Advance Horizontal Alignment Warning Sign	Advisory Speed Plaque
		0 0	1390 1440	250 250	Yes Yes	Yes Yes	** **	X X	-	Chevron Chevron	-	-	-	-
*Curve numberin Ranking Crit t		consec	cutive, as so		Severe Crashes Radius	Criteria > 0 500 to 1200 350 to 650 Yes Yes		Curves are se	elected for proje s ty or Existing Ch	ct if:	ivel road, etc			
Describe Pro	pose	d Sa	fety Impro	ovements										
			Advano	ce Warning	Arrow Sign/Speed Advis Shoulder R	Description Chevrons Board Only sory Plaque umble Strip Ider Paving	Proactive Proactive Proactive Proactive	\$500 \$800	per curve per curve per curve per mile per mile	Quantity 2 0 0 0 .0 miles .0 miles	Total cost \$6,600 \$0 \$0 \$0 \$0 \$0	Notes -		
Project Cost	Estin	nate	(attach de	etailed co	ру)					Proposed Y	ear of Construct	ion		
		_		Local Mato	ch (10% of Total p	deral Funds project cost) pject Cost	\$660	-						
NDDOT Cent				ls.	ı	D-4	Ni mi	T		1	IID November			
Project Accepted Notes	1?	[[Yes 🗆	No		Reference	Number	<u> </u>			ID Number	<u> </u>		
													Page Segment ID Date	

Walsh County Summary of Rural Intersection Projects

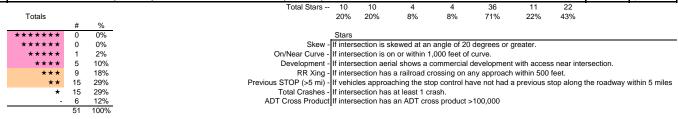
				Mainline Dynamic Warning		Signs &	
Page	Intersection ID	Description	Risk Ranking	Sign	Install Street Lights	Markings	Project Cost (\$)
1	19.09	US 81 & 55th St NE (Walsh 19)	****	-	Х	Х	\$7,850
2	12.07	136th Ave NE (Walsh 12) & 68th St NE/Park St/ND 17	***	-	Х	Х	\$9,000
3	9.1	73rd St NE (Walsh 9) & US 81	***	-	Х	Х	\$9,700
4	15.04	US 81 & 61st St NE (Walsh 15)	***	x	Х	х	\$59,700
5	19.08	US 81 & 55th St NE (Walsh 19)	***	x	Х	Х	\$57,850
6	4.06	70th St NE & 155th Ave NE (Walsh 4)	***	-	-	Х	\$1,150
7	9.08	75th St NE (Walsh 9) & 140th Ave NE/ND 18	***	-	X	X	\$9,000
8	15.02	128th Ave NE/ND 32 & 62nd St NE (Walsh 15)	***	X	X	Х	\$59,700
9	1.02	77th St NE (Walsh 1) & ND 18	***	-	X	X	\$9,000
10	6.02	55th St NE (Walsh 19) & 146th Ave NE (Walsh 6)	***	-	-	X	\$6,700
11	9.06	75th St NE (Walsh 9) & 129th Ave NE/ND 32	***	-	Х	х	\$9,000
12	11.01	69th St NE/ND 17 & [Unnamed] (Walsh 11)	***	х	Х	Х	\$57,850
13	14.03	126th Ave NE (Walsh 14) & 68th St NE/ND 17	***	-	-	Х	\$1,150
14	504.02	149th Ave NE (Walsh 504) & US 81	***	-	Х	х	\$7,850
				4	11	14	\$305,500

Walsh County Rural Intersection Listing

Int#	Intersection Description	Skew	On/Near Curve	Development	RR Xing	ADT	Previous STOP (>5mi)	Total Crashes	ADT Cross Product >100,000	Cra	ash Cost
1.01	77 1/2th St NE (Walsh 1) & ND 18	No	No	No	No	1340	No	3	Yes	\$	848,000
1.02	77th St NE (Walsh 1) & ND 18	No	No	Yes	No	1443	Yes	0	Yes	\$	-
4.01	61st St NE (Walsh 15) & 156th Ave NE (Walsh 4)	No	No	Yes	No	580	Yes	0	No	\$	-
4.03	66th St NE & 155th Ave NE (Walsh 4)	No	No	No	No	114	No	0	No	\$	-
4.04	69th St NE/ND 17 & 156th Ave NE (Walsh 4)	No	No	No	No	1885	No	1	Yes	\$	12,000
4.05	69th St NE/ND 17 & 155th Ave NE (Walsh 4)	No	No	No	No	2080	Yes	0	Yes	\$	-
4.06	70th St NE & 155th Ave NE (Walsh 4)	No	Yes	No	No	410	Yes	1	No	\$	12,000
4.08	73rd St NE (Walsh 9) & 155th Ave NE (Walsh 4)	No	No	No	No	380	Yes	0	No	\$	-
6.02	55th St NE (Walsh 19) & 146th Ave NE (Walsh 6)	No	No	No	Yes	655	Yes	0	Yes	\$	-
6.03	61st St NE (Walsh 15) & 146th Ave NE (Walsh 6)	No	No	No	No	770	Yes	1	No	\$	91,000
8.01	62nd St NE (Walsh 15) & 142nd Ave NE (Walsh 8)	No	No	No	No	422	Yes	0	No	\$	-
8.02	67th St NE & 142nd Ave NE (Walsh 8)	Yes	Yes	No	No	139	Yes	0	No	\$	-
8.03	62nd St NE & 144th Ave NE (Walsh 8)	No	No	No	No	139	Yes	0	No	\$	-
8.04	69th St NE/ND 17 & 144th Ave NE (Walsh 8)	No	No	No	No	2775	Yes	0	Yes	\$	-
8.05	73rd St NE (Walsh 9) & 144th Ave NE (Walsh 8)	No	No	No	No	505	No	0	No	\$	-
9.01	74th St NE (Walsh 9) & 112th Ave NE (Walsh 22)	No	No	No	No	375	Yes	0	No	\$	-
9.02	74th St NE (Walsh 9) & 119th Ave NE (Walsh 16)	No	No	No	No	330	Yes	0	No	\$	-
9.06	75th St NE (Walsh 9) & 129th Ave NE/ND 32	No	No	Yes	No	1280	Yes	0	Yes	\$	-
9.07	75th St NE (Walsh 9) & 135th Ave NE (Walsh 12)	No	No	No	No	660	Yes	0	Yes	\$	-
9.08	75th St NE (Walsh 9) & 140th Ave NE/ND 18	No	No	No	No	1427	Yes	1	Yes	\$	12,00
9.09	73rd St NE (Walsh 9) & 140th Ave NE/ND 18	No	No	No	No	1265	Yes	0	Yes	\$	-
9.10	73rd St NE (Walsh 9) & US 81	Yes	No	No	Yes	1865	Yes	0	Yes	\$	-
11.01	69th St NE/ND 17 & [Unnamed] (Walsh 11)	Yes	Yes	No	Yes	668	No	0	Yes	\$	-
11.02	ND 17 & 120th Ave NE/69th St NE (Walsh 11)	No	Yes	No	No	483	No	1	No	\$	12,000
11.03	122nd Ave NE (Walsh 11) & ND 17	Yes	No	No	Yes	630	No	0	No	\$	-
12.02	131st Ave NE (Walsh 12) & 62nd St NE (Walsh 15)	No	No	No	No	505	Yes	0	No	\$	-
12.05	136th Ave NE (Walsh 12) & 56th St NE (Walsh 19)	No	No	No	No	222	Yes	0	No	\$	-
12.06	135th Ave NE (Walsh 12) & 62nd St NE (Walsh 15)	No	No	No	No	770	Yes	0	Yes	\$	-
12.07	136th Ave NE (Walsh 12) & 68th St NE/Park St/ND 17	No	No	Yes	No	3223	Yes	1	Yes	\$	12,00
14.01	125th Ave NE (Walsh 14) & 58th St NE (Walsh 19)	No	No	No	No	198	Yes	0	No	\$	-
14.02	125th Ave NE (Walsh 14) & 62nd St NE (Walsh 15)	No	No	No	No	725	Yes	0	Yes	\$	-
14.03	126th Ave NE (Walsh 14) & 68th St NE/ND 17	Yes	Yes	No	No	820	Yes	0	No	\$	-
15.01	116th Ave NE/ND 35 & 62nd St NE (Walsh 15)	No	No	No	No	263	Yes	1	No	\$	136,00
15.02	128th Ave NE/ND 32 & 62nd St NE (Walsh 15)	No	No	No	No	1198	Yes	1	Yes	\$	12,00
15.03	139th Ave NE/ND 18 & 62nd St NE (Walsh 15)	No	No	No	No	880	No	0	Yes	\$	-
15.04	US 81 & 61st St NE (Walsh 15)	Yes	Yes	No	No	3065	Yes	0	Yes	\$	-
16.01	119th Ave NE/Kongsberg St (Walsh 16) & 69th St NE/ND 17	No	No	No	No	290	Yes	0	No	\$	-
16.02	County Rd 16/119th Ave NE (Walsh 16) & 78th St NE (Walsh 32)	No	No	No	No	100	Yes	1	No	\$	12,00
19.01	116th Ave NE/ND 35 & 57th St NE (Walsh 19)	No	No	No	No	175	Yes	0	No	\$	-
19.02	116th Ave NE/ND 35 & 58th St NE (Walsh 19)	No	No	No	No	170	Yes	0	No	\$	-
19.03	128th Ave NE/ND 32 & 58th St NE (Walsh 19)	No	No	No	No	698	No	0	No	\$	-
19.04	128th Ave NE/ND 32 & 55th St NE (Walsh 19)	No	No	No	No	857	No	0	Yes	\$	-
19.05	139th Ave NE/ND 18 & 56th St NE (Walsh 19)	No	No	No	No	715	Yes	0	No	\$	-
9.08	US 81 & 55th St NE (Walsh 19)	Yes	Yes	No	No	1738	Yes	0	Yes	\$	-
9.09	US 81 & 55th St NE (Walsh 19)	Yes	Yes	No	No	1743	Yes	1	Yes	\$	12,00
22.01	112th Ave NE (Walsh 22) & 69th St NE/ND 17	No	No	No	No	238	Yes	0	No	\$	
32.01	116th Ave NE (Walsh 39) & 78th St NE (Walsh 32)	No	No	No	No	70	Unknown	0	No	\$	-
32.02	123rd Ave NE (Walsh 45) & 78th St NE (Walsh 32)	No	No	No	No	45	Unknown	0	No	\$	-
03.01	Woodcrest Dr (Walsh 503) & 69th PI NE/W 5th St/69 1/2th St NE (Walsh 504)	No	No	No	No	195	No	0	No	\$	-
04.01	149th Ave NE (Walsh 504) & 61st St NE (Walsh 15)	Yes	Yes	No	No	375	No	0	No	\$	-
04.02	149th Ave NE (Walsh 504) & US 81	Yes	Yes	No	No	870	No	0	Yes	\$	-

Walsh County Rural Intersection Prioritization

Rank	Int#	Intersection Description	Skew	On/Near Curve	Development	RR Xing	Previous STOP (>5mi)	Total Crashes	ADT Cross Product >100,000	Priority	Cra	ash Cost
1	19.09	US 81 & 55th St NE (Walsh 19)	*	*			*	*	>100,000 ★	****	\$	12.000
2	12.07	136th Ave NE (Walsh 12) & 68th St NE/Park St/ND 17	*	*	*		*	*	*	****	\$	12,000
3	9.10	73rd St NE (Walsh 9) & US 81	*			*	*		*	****	\$	12,000
4	11.01	69th St NE/ND 17 & [Unnamed] (Walsh 11)	*	*		*			*	****	\$	-
5	15.04	US 81 & 61st St NE (Walsh 15)	*	*			*		*	****	\$	-
6	19.08	US 81 & 55th St NE (Walsh 19)	*	*			*		*	****	\$	
7	4.06	70th St NE & 155th Ave NE (Walsh 4)		*			*	*		***	\$	12,000
8	9.08	75th St NE (Walsh 9) & 140th Ave NE/ND 18					*	*	*	***	\$	12,000
9	15.02	128th Ave NE/ND 32 & 62nd St NE (Walsh 15)					*	*	*	***	\$	12,000
10	1.02	77th St NE (Walsh 1) & ND 18			*		*		*	***	\$	-
11	6.02	55th St NE (Walsh 19) & 146th Ave NE (Walsh 6)				*	*		*	***	\$	-
12*	8.02	67th St NE & 142nd Ave NE (Walsh 8)	*	*			*			***	\$	-
13	9.06	75th St NE (Walsh 9) & 129th Ave NE/ND 32			*		*		*	***	\$	-
14	14.03	126th Ave NE (Walsh 14) & 68th St NE/ND 17	*	*			*			***	\$	-
15	504.02	149th Ave NE (Walsh 504) & US 81	*	*					*	***	\$	-
16	1.01	77 1/2th St NE (Walsh 1) & ND 18						*	*	**	\$	848,000
17	15.01	116th Ave NE/ND 35 & 62nd St NE (Walsh 15)					*	*		**		136,000
18	6.03	61st St NE (Walsh 15) & 146th Ave NE (Walsh 6)					*	*		**	\$	91,000
19	4.04	69th St NE/ND 17 & 156th Ave NE (Walsh 4)						*	*	**	\$	12,000
20	11.02	ND 17 & 120th Ave NE/69th St NE (Walsh 11)		*				*		**	\$	12.000
21	16.02	County Rd 16/119th Ave NE (Walsh 16) & 78th St NE (Walsh 32)					*	*		**	\$	12,000
22	4.01	61st St NE (Walsh 15) & 156th Ave NE (Walsh 4)			*		*			**	\$	-
23	4.05	69th St NE/ND 17 & 155th Ave NE (Walsh 4)					*		*	**	\$	-
24	8.04	69th St NE/ND 17 & 144th Ave NE (Walsh 8)					*		*	**	\$	-
25	9.07	75th St NE (Walsh 9) & 135th Ave NE (Walsh 12)					*		*	**	\$	-
26	9.09	73rd St NE (Walsh 9) & 140th Ave NE/ND 18					*		*	**	\$	-
27	11.03	122nd Ave NE (Walsh 11) & ND 17	*			*				**	\$	-
28	12.06	135th Ave NE (Walsh 12) & 62nd St NE (Walsh 15)					*		*	**	\$	-
29	14.02	125th Ave NE (Walsh 14) & 62nd St NE (Walsh 15)					*		*	**	\$	-
30	504.01	149th Ave NE (Walsh 504) & 61st St NE (Walsh 15)	*	*						**	\$	-
31	4.08	73rd St NE (Walsh 9) & 155th Ave NE (Walsh 4)					*			*	\$	-
32	8.01	62nd St NE (Walsh 15) & 142nd Ave NE (Walsh 8)					*			*	\$	-
33	8.03	62nd St NE & 144th Ave NE (Walsh 8)					*			*	\$	-
34	9.01	74th St NE (Walsh 9) & 112th Ave NE (Walsh 22)					*			*	\$	-
35	9.02	74th St NE (Walsh 9) & 119th Ave NE (Walsh 16)					*			*	\$	-
36	12.02	131st Ave NE (Walsh 12) & 62nd St NE (Walsh 15)					*			*	\$	-
37	12.05	136th Ave NE (Walsh 12) & 56th St NE (Walsh 19)					*			*	\$	-
38	14.01	125th Ave NE (Walsh 14) & 58th St NE (Walsh 19)					*			*	\$	-
39	15.03	139th Ave NE/ND 18 & 62nd St NE (Walsh 15)							*	*	\$	-
40	16.01	119th Ave NE/Kongsberg St (Walsh 16) & 69th St NE/ND 17					*			*	\$	-
41	19.01	116th Ave NE/ND 35 & 57th St NE (Walsh 19)					*			*	\$	-
42	19.02	116th Ave NE/ND 35 & 58th St NE (Walsh 19)					*			*		-
43	19.04	128th Ave NE/ND 32 & 55th St NE (Walsh 19)							*	*	\$	-
44	19.05	139th Ave NE/ND 18 & 56th St NE (Walsh 19)					*			*	\$	-
45	22.01	112th Ave NE (Walsh 22) & 69th St NE/ND 17					*			*	\$	-
46	4.03	66th St NE & 155th Ave NE (Walsh 4)									\$	-
47	8.05	73rd St NE (Walsh 9) & 144th Ave NE (Walsh 8)									\$	-
48	19.03	128th Ave NE/ND 32 & 58th St NE (Walsh 19)									\$	-
49	32.01	116th Ave NE (Walsh 39) & 78th St NE (Walsh 32)									\$	-
50 58	32.02 503.01	123rd Ave NE (Walsh 45) & 78th St NE (Walsh 32) Woodcrest Dr (Walsh 503) & 69th PI NE/W 5th St/69 1/2th St NE (Walsh 504)	4)								\$	-
90	503.01		rs 10	10	4	4	36	11	22		Φ	



LUCLUMAYOAFFTYIA	IDDOVE!	AENT DROOP A	M (HOID) DDO II	OT ABBLE	OATION		
HIGHWAY SAFETY IN North Dakota Department of			M (HSIP) PROJE	ECT APPLI	CATION		
SFN 59959 (06-2011)	Transportati	on r rogramming					
		US	81 & 55th St N	NE (Walsh	າ 19)		
Agency Name:					DOT District	-	
Contact Name:				Teleph	one Number	: 701-352-15	30
Email Address:							
Please attach a location map(s).	You may use	e additional sheets to for	urther describe your pro	ject			
Location Description					CHCD E	nnhaois Araa (al	neck all that apply)
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Walsh 1743	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 1648 190		Reduce Alcoh Increase the U Younger Drive Curb Aggress Improvements	ol Impaired Driv Jse of Safety Re er/Older Driver S ive Driving to Address Lan nergency Medica	ing straints for all Occupants
Describe Current Safety							
North Dakota TBD, 2008 - 2012		5	years				
	Total	Angle	K+A		- L		
Crashes		0	0.00		1		
Rate (per MVM)	0.3	0.0	0.0	_			The same of the sa
					1		
	Value	Critical	Risk Ranking			ST	at the same of the
Skew		Yes	*			X31.1	(C) (C)
On/Near Curve		Yes	*			161	Land Land and
Development Near RR Crossing		Yes Yes				Y	A PACE OF THE PACE
Distance from previous STOP		Yes	*				
Volume Cross Product		≥ 100,000	*				A STATE OF THE PARTY OF THE PAR
Total Crashes	1	>0	*	<u> </u>	0 7		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			****			-	
Describe Proposed Safet	y Improve	ments					
	D	Heir Occar		11.26	0		
	Description Roundabout	Unit Cost \$1,000,000	per intersection	Units 0	Cost \$0.00	_Notes -	
	onal Median	. , ,	per intersection	0	\$0.00		
Mainline Dynamic W	arning Sign		per intersection	0	\$0.00		
	ose Median		per intersection	0	\$0.00		
	Street Lights e Stop Sign		per street light per sign	1 1	\$6,000.00 \$350.00		
Upgrade Ju			per sign	1	\$350.00		
Upgrade Stop			per sign	1	\$450.00		
Upgrade Stop Ahe	ead Marking de Stop Bar		per marking per marking	1 1	\$450.00 \$250.00		
Review Sign	•		per intersection	0	\$0.00		
3				-	\$7,850.00	_	
Signs and Markings and Street L			er of minor legs associa				
Project Cost Estimate (at	tach detail	led copy)		Proposed	Year of Con	struction	
Fed	deral Funds	\$7,065					
Local Match (10% of Total p		\$785	_				
Total Pro	oject Cost	\$7,850					
NDDOT Control Office Or	als:						
NDDOT Central Office Or Project Accepted?		□No	Reference Number	T		ID Number	T
Notes	L les L	7110	Neierence Number			ID Number	<u> </u>
							Page: 1
						Inte	ersection ID: 19.09
							Date: 10/23/2013

		ENT DDGGD	M (UOID) DD 0 U		0.4.710.11		
HIGHWAY SAFETY IMINorth Dakota Department of Tr			M (HSIP) PROJI	ECT APPLI	CATION		
SFN 59959 (06-2011)	ansportatio	with rogramming					
	1:	36th Ave NE	(Walsh 12) &	68th St NE	E/Park St/	ND 17	
Agency Name: \					DOT District	-	
Contact Name: S				Teleph	one Number	: 701-352-15	30
Email Address: s							
Please attach a location map(s). Y Location Description	ou may use	additional sheets to fi	urther describe your pro	oject			
Location Description				T	SHSP En	nphasis Area (ch	neck all that apply)
Configuration: A Configuration (2): Urban/Rural: F County: V Entering ADT: 3	Jndivided Rural Walsh	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 2938		Reduce Alcoh Increase the L Younger Drive Curb Aggressi Improvements	ol Impaired Driv Use of Safety Re Pr/Older Driver S Eve Driving To Address Lan Dergency Medica	ing straints for all Occupants
Describe Comment Cafety Is	P C	votomio Bonkina	Daview				
Describe Current Safety Is North Dakota TBD, 2008 - 2012	sues & S		years				
North Barota 1BB, 2000 - 2012		3	years				
	Total	Angle	K+A			100	
Crashes Rate (per MVM)	1 0.2	0 0.0	0.00 0.0			- management	
Nate (per mivin)	0.2		0.0				
	Value	Critical	Risk Ranking			A 200 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Skew On/Near Curve	No No	Yes Yes				- S. S. S. S.	
Development	Yes	Yes	*		100	1	
Near RR Crossing	No	Yes				100	
Distance from previous STOP	Yes	Yes	*				
Volume Cross Product Total Crashes	Yes 1	≥ 100,000 >0	* *				1
Total Orabics	<u> </u>		***	<u> </u>		4	The wife
Describe Proposed Safety	Improver	nents					
	-						
	escription oundabout	Unit Cost	per intersection	Units 0	Cost \$0.00	_Notes -	
	nal Median		per intersection	0	\$0.00		
Mainline Dynamic Wa		\$50,000	per intersection	0	\$0.00		
	se Median		per intersection	0	\$0.00		
Installing Str Upgrade	Stop Sign		per street light per sign	1 2	\$6,000.00 \$700.00		
Upgrade Jun		\$350	per sign	2	\$700.00		
Upgrade Stop Al Upgrade Stop Ahea			per sign per marking	2 1	\$900.00 \$450.00		
1 0	e Stop Bar		per marking	1	\$250.00		
Review Signs		\$2,450	per intersection	0	\$0.00		
Signs and Markings and Street Lig	aht project o	acta waru by the numb	or of minor logo accord	atad with the inte	\$9,000.00		
Project Cost Estimate (atta			er or minor legs associa		Year of Cons	struction	
, , , , , , , , , , , , , , , , , , , ,		7.77		1			
	eral Funds	\$8,100 \$900					
Local Match (10% of Total p <u>ro</u> Total Proj		\$9,000	=				
Total Troj		40,000					
NDDOT Central Office Onl	_						
Project Accepted? [Notes	Yes] No	Reference Number			ID Number	
Notes							
							Page: 2
						Inte	ersection ID: 12.07 Date: 10/23/2013

HIGHWAY SAFETY IN North Dakota Department of			M (HSIP) PROJE	CT APPLI	CATION		
SFN 59959 (06-2011)	•		rd St NE (Wals	sh 0) & 110	2 21		
Agency Name: Contact Name: Email Address:	Sharon L slipsh@r	ounty .ipsh nd.gov	,	ND Teleph	et: 6 er: 701-352-1530		
Please attach a location map(s). Location Description	You may us	se additional sneets to r	urtner describe your proj	ect			
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Walsh	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 1593		Reduce Alcoh Increase the I Younger Drive Curb Aggress Improvements Enhancing Er	Emphasis Area (check all that apply) shol Impaired Driving Use of Safety Restraints for all Occupants ver/Older Driver Safety sive Driving ts to Address Lane Departure Crashes mergency Medical Capabilities to Increase rsection Safety	Survivabilit
Describe Current Safety	lssues & S						
North Dakota TBD, 2008 - 2012		5	years				
Crashes Rate (per MVM)	Total 0 0.0	Angle 0 0.0	K+A 0.00 0.0	-			
Skew		Critical Yes	Risk Ranking ★				
On/Near Curve Development Near RR Crossing Distance from previous STOP	No Yes	Yes Yes Yes Yes	*				
Volume Cross Product Total Crashes	Yes	≥ 100,000 >0	*			A Principal of the Control of the Co	
			***			The second secon	
Describe Proposed Safet	y Improve	ements					
	Description	Unit Cost		Units	Cost	Notes	
F	Roundabout		per intersection	0	\$0.00	<u> </u>	
Direction Mainline Dynamic W	nal Median arning Sign		per intersection per intersection	0 0	\$0.00 \$0.00		
Cle	ose Median		per intersection	0	\$0.00		
	treet Lights e Stop Sign		per street light per sign	1 2	\$6,000.00 \$700.00		
Upgrade Ju	nction Sign	\$350	per sign	2	\$700.00		
Upgrade Stop Abe			per sign per marking	2 2	\$900.00 \$900.00		
	de Stop Bar	\$250	per marking	2	\$500.00		
Review Sigr	ns and CST	\$2,450	per intersection	0	\$0.00 \$9,700.00		
Signs and Markings and Street L	ight project	costs vary by the numb	er of minor legs associa	ted with the inte	. ,		
Project Cost Estimate (at	tach deta	iled copy)		Proposed	Year of Con	nstruction	
Local Match (10% of Total p	deral Funds project cost) pject Cost	\$8,730 \$970 \$9,700	-				
		. ,					
NDDOT Central Office Or Project Accepted?		□No	Reference Number			ID Number	
Notes	163		Traisionoe Hullibel			15 Humber	
						Page: 3 Intersection ID: 9.10 Date: 10/23/2013	

UIOLIWAY OA EETY III	1000VE	UENT DDOOD A	M (UOID) DDO II	FOT ADDIT	0.4.71.0.11			
HIGHWAY SAFETY IN North Dakota Department of			M (HSIP) PROJE	ECT APPLI	CATION			
SFN 59959 (06-2011)	Transportati							
		69th St N	IE/ND 17 & [Ur	nnamed] ((Walsh 11))		
Agency Name:					DOT District			
Contact Name:				Teleph	one Number	: 701-352-15	30	
Email Address:								
Please attach a location map(s).	You may use	e additional sheets to for	urther describe your pro	ject				
Location Description					CHCD E~	anhasia Aras (al	and all that apply	
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Walsh 668	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 478 380		Reduce Alcoho Increase the U Younger Drive Curb Aggressi Improvements	ol Impaired Driv Jse of Safety Re In/Older Driver S ve Driving to Address Lan Dergency Medica	straints for all Occupan	
Describe Current Safety I								
North Dakota TBD, 2008 - 2012		5	years					
	Total	Angle	K+A		10.200		CONTRACTOR OF THE PARTY OF THE	
Crashes		0	0.00				TO SEE THE PARTY OF	
Rate (per MVM)	0.0	0.0	0.0					
	Value	Critical	Risk Ranking					
Skew		Yes	*					8
On/Near Curve Development		Yes Yes	*		1	-		
Near RR Crossing		Yes	*					
Distance from previous STOP		Yes						
Volume Cross Product		≥ 100,000	*		4			
Total Crashes	0	>0	***	_	MESSATI	1000	and the	
Describe Proposed Safet	y Improve	ments						
	Description	Unit Cost		Units	Cost	Notes		
	Roundabout		per intersection	0	\$0.00	_Notes		
	nal Median		per intersection	0	\$0.00			
Mainline Dynamic W			per intersection	1	\$50,000.00			
	ose Median Street Lights		per intersection per street light	0 1	\$0.00 \$6,000.00			
	e Stop Sign		per sign	1	\$350.00			
Upgrade Ju			per sign	1	\$350.00			
Upgrade Stop A Upgrade Stop Ahe			per sign per marking	1	\$450.00 \$450.00			
	de Stop Bar		per marking	1	\$250.00			
Review Sigr	•	·	per intersection	0	\$0.00	_		
a					\$57,850.00			
Signs and Markings and Street L Project Cost Estimate (at			er of minor legs associa		Year of Cons	struction		
Troject Cost Estimate (at	lacii uctan	led copy)		Тторозец	rear or con.	Struction		
	deral Funds	\$52,065						
Local Match (10% of Total p		\$5,785	_					
l otal Pro	oject Cost	\$57,850						
NDDOT Central Office On	ilv							
Project Accepted?		□No	Reference Number			ID Number		
Notes								
							Page: 4	
						Inte	ersection ID: 11.01 Date: 10/23/2013	3

HIGHWAY SAFETY IMPRO		AM (HSIP) PROJEC	T APPLI	ICATION	
North Dakota Department of Transp SFN 59959 (06-2011)	ortation Programming				
,	US	81 & 61st St NE	(Walsi	h 15)	
Agency Name: Wals				DOT District	· ·
Contact Name: Share	-		Telepl	hone Number	: 701-352-1530
Email Address: slips Please attach a location map(s). You m		further deceribe veur preiest			
Location Description	ay use additional sheets to	iuitilei describe your project			
Location Description				SHSP Er	nphasis Area (check all that apply)
					ol Impaired Driving
Configuration: X	Traffic Control Device				Jse of Safety Restraints for all Occupants
Configuration (2): Undivi Urban/Rural: Rural	ded Street Lights Flashers			Curb Aggress	er/Older Driver Safety ive Driving
County: Walsh					to Address Lane Departure Crashes
Entering ADT: 3065	Minor Entering ADT	: 840			nergency Medical Capabilities to Increase Survivabilit
			\checkmark	Improve Inters	section Safety
Describe Current Safety Issues	s & Systemic Ranking	ı Review			
North Dakota TBD, 2008 - 2012		5 years			
Tot	al Angle	K+A			
Crashes 0	· 3 ·	0.00			
Rate (per MVM) 0.0		0.0			
					200
Valu	ue Critical	Risk Ranking			
Skew Ye		★			
On/Near Curve Ye	s Yes	*		T S BOLD	The Men
Development No	Yes			74	
Near RR Crossing No				CHICA FOR	
Distance from previous STOP Yes Volume Cross Product Yes		* *			
Total Crashes 0	•			AND DESCRIPTION	
		***			A SHOW WE SHOW THE SH
Describe Proposed Safety Imp	rovements				
Danasir	otion Unit Coot		l laita	Cont	Notes Occurred and accompanies to the control of
Descri <u>r</u> Rounda		per intersection	Units 0	Cost \$0.00	Notes - Segment and curve projects suggested on other sheets.
Directional Me		per intersection	0	\$0.00	other shocts.
Mainline Dynamic Warning		per intersection	1	\$50,000.00	
Close Me	. ,	per intersection	0	\$0.00	
Installing Street Li Upgrade Stop		per street light per sign	1 2	\$6,000.00 \$700.00	
Upgrade Junction		per sign	2	\$700.00	
Upgrade Stop Ahead	Sign \$450	per sign	2	\$900.00	
Upgrade Stop Ahead Mar	•	per marking	2 2	\$900.00	
Upgrade Stop Review Signs and		per marking per intersection	0	\$500.00 \$0.00	
		1		\$59,700.00	_
Signs and Markings and Street Light pro Project Cost Estimate (attach of				ersection. If Year of Con	otruction
Froject Cost Estimate (attach t	<i>тетапей сору)</i>		rioposec	i real of Con	Struction
Federal Fu					
Local Match (10% of Total project of		_			
Total Project C	Cost \$59,700				
NDDOT Central Office Only					
Project Accepted? ☐ Yes	□No	Reference Number			ID Number
Notes					
					Page: 5
					Intersection ID: 15.04

LUCINAL CAFETY IN	IDDOVE	MENT DDOOD A	M (HOID) DDO II	TOT A DDI I	OATION			
HIGHWAY SAFETY IN North Dakota Department of			IM (HSIP) PROJE	ECT APPLI	CATION			
SFN 59959 (06-2011)	and portain							
			81 & 55th St N					
Agency Name:					DOT District	-	••	
Contact Name: Email Address:		•		ı elepr	one Number	: 701-352-15	30	
Please attach a location map(s).			urther describe your pro	iect				
Location Description	. ou may us		uniner december year pro	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Walsh	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	: No : No : 1585	N	Reduce Alcoholincrease the U Younger Drive Curb Aggressi Improvements	ol Impaired Driving of Safety Resolver Safety	estraints for all Occupants	ırvivability
Describe Current Safety I		Systemic Ranking	Review					
North Dakota TBD, 2008 - 2012		5	years					
	Total	Angle	K+A				The second second second	
Crashes		0	0.00					
Rate (per MVM)	0.0	0.0	0.0					
	Value	Critical	Risk Ranking					
Skew		Yes	*			P		
On/Near Curve		Yes	*					
Development Near RR Crossing		Yes Yes					- 1	
Distance from previous STOP		Yes	*		100	N I		
Volume Cross Product		≥ 100,000	*			0.00		
Total Crashes	0	>0	***	_				
Describe Proposed Safet	v Improve	ments						
Describe i roposed darei	y improve	ments						
	Description	Unit Cost		Units	Cost	Notes -		
	Roundabout onal Median		per intersection per intersection	0	\$0.00 \$0.00			
Mainline Dynamic W			per intersection	1	\$50,000.00			
Clo	ose Median		per intersection	0	\$0.00			
	treet Lights e Stop Sign		per street light per sign	1 1	\$6,000.00 \$350.00			
Upgrade Ju	. •		per sign	1	\$350.00			
Upgrade Stop			per sign	1	\$450.00			
Upgrade Stop Ahe	ad Marking		per marking	1	\$450.00			
. 0	de Stop Bar	•	per marking	1	\$250.00			
Review Sigr	is and CST	\$2,450	per intersection	0	\$0.00 \$57,850.00	_		
Signs and Markings and Street L	_iaht proiect (costs vary by the numb	er of minor legs associa	ted with the inte				
Project Cost Estimate (at					Year of Cons	struction		
E.	densi Errede	#50.005						
Local Match (10% of Total p	deral Funds	\$52,065 \$5,785						
	ject Cost	\$57,850	_					
	<u> </u>	. ,						
NDDOT Central Office On			Defense Newber	<u> </u>		IID Noveles		
Project Accepted? Notes	Yes	□No	Reference Number			ID Number		
Notes								
							Page: 6	
						Inte	ersection ID: 19.08 Date: 10/23/2013	

I II O I II O I I I I I I I I I I I I I	DD OVE	MENT DD OOD A	M (UOID) DDG I		NATION!		
HIGHWAY SAFETY IM North Dakota Department of 1			M (HSIP) PROJE	ECT APPLIC	CATION		
SFN 59959 (06-2011)	ranoportati						
			t NE & 155th A	•	•		
Agency Name:					DOT District		
Contact Name:				Telepho	one Numbei	r: 701-352-15	30
Email Address: Please attach a location map(s).			urther describe your pro	iect			
Location Description	Tou may do	o additional officers to the	artiror accombo your proj	joot			
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Walsh	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 305		Reduce Alcoh Increase the U Younger Drive Curb Aggress Improvements Enhancing Er	nol Impaired Drivi Jse of Safety Re er/Older Driver S ive Driving s to Address Lan	straints for all Occupants
Describe Current Safety I	ssues & S	Systemic Ranking	Review				
North Dakota TBD, 2008 - 2012		5	years				
	Total	Angle	K+A	1	The second		
Crashes	1	0	0.00	_			and the second
Rate (per MVM)	1.3	0.0	0.0	_			
					Ē		10 和美工
	Value	Oritinal	Diele Deutsie e				4
Skew	Value No	Critical Yes	Risk Ranking	-			
On/Near Curve	Yes	Yes	*				The second secon
Development	No	Yes			MILENA		(C) (A) (C) (A) (A) (A) (A) (A) (A) (A) (A) (A) (A
Near RR Crossing Distance from previous STOP	No Yes	Yes Yes	*				
Volume Cross Product	No	≥ 100,000				31	1
Total Crashes	1	>0	* ***		Maria Car		1

Describe Proposed Safety	y Improve	ments					
	Description	Unit Cost		Units	Cost	Notes - Qualifi	es for a street light. Option to replace
	Coundabout		per intersection	0	\$0.00		tead of STOP signs. Segment and
	nal Median		per intersection	0	\$0.00		suggested on other sheets.
Mainline Dynamic Wa	arning Sign ose Median		per intersection per intersection	0	\$0.00 \$0.00		
Installing S			per street light	0	\$0.00		
	Stop Sign		per sign	1	\$350.00		
Upgrade Ju Upgrade Stop A			per sign	1 1	\$350.00 \$450.00		
Upgrade Stop Ahe			per sign per marking	0	\$0.00		
. •	le Stop Bar	\$250	per marking	0	\$0.00		
Review Sign	s and CST	\$2,450	per intersection	0	\$0.00 \$1,150.00	_	
Signs and Markings and Street L	ight project o	costs vary by the numb	er of minor legs associa	ted with the inter			
Project Cost Estimate (att			,		Year of Con	struction	
Food	leral Funds	¢4.025					
Local Match (10% of Total p		\$1,035 \$115					
	ject Cost	\$1,150	-				
AIDDOT O O O.	1						
NDDOT Central Office On Project Accepted?		□ No	Reference Number	<u> </u>		ID Number	T T T T T T T T T T T T T T T T T T T
Notes	103		Reference Number	I		ID Number	
	_						Page: 7
						Inte	ersection ID: 4.06 Date: 10/23/2013

	100 0\/EI	HENT DOOD A	M (UOID) DDG I	-07 4 001 1	0.4.710.11		
HIGHWAY SAFETY IM North Dakota Department of 1			M (HSIP) PROJE	ECT APPLI	CATION		
SFN 59959 (06-2011)							
			E (Walsh 9) &				
Agency Name:					DOT District	-	•
Contact Name: Email Address:		•		i eiepn	one Number	: 701-352-15	30
Please attach a location map(s).			urther describe your pro	iect			
Location Description				,			
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	thru-STOP No No 1175 252		Reduce Alcoh Increase the U Younger Drive Curb Aggress Improvements Enhancing En	SHSP Emphasis Area (check all that apply) ce Alcohol Impaired Driving ase the Use of Safety Restraints for all Occupants ger Driver/Older Driver Safety Aggressive Driving evernents to Address Lane Departure Crashes incing Emergency Medical Capabilities to Increase Survivability ever Intersection Safety			
Describe Current Safety I	ssues & S			,			
North Dakota TBD, 2008 - 2012		5	years				
	Total	Angle	K+A			-	
Crashes	1	0	0.00		TAKE THE SE		
Rate (per MVM)	0.4	0.0	0.0	_		84.6	
					通酬的 (4) 喜		
	Value	Critical	Risk Ranking				
Skew	No	Yes	Nisk Natiking				1
On/Near Curve	No	Yes			SO BE	1/4	
Development Near RR Crossing	No No	Yes Yes					
Distance from previous STOP	Yes	Yes	*				
Volume Cross Product		≥ 100,000	*			741	
Total Crashes	11	>0	* *	_			
Describe Proposed Safety	y Improvei	ments					
1	Description	Unit Cost		Units	Cost	Notes - Segme	ent and curve projects suggested on
	Roundabout		per intersection	0	\$0.00	other sheets.	. ,
Directio Mainline Dynamic Wa	nal Median		per intersection per intersection	0 0	\$0.00 \$0.00		
=	ose Median	. ,	per intersection	0	\$0.00		
Installing S			per street light	1	\$6,000.00		
Upgrade Upgrade Ju	e Stop Sign		per sign	2	\$700.00 \$700.00		
Upgrade Stop A			per sign per sign	2 2	\$900.00		
Upgrade Stop Ahe	0	\$450	per marking	1	\$450.00		
. 0	de Stop Bar	·	per marking	1	\$250.00		
Review Sign	is and CST	\$2,450	per intersection	0	\$0.00 \$9,000.00	_	
Signs and Markings and Street L			er of minor legs associa		rsection.		
Project Cost Estimate (att	tach detail	led copy)		Proposed	Year of Con	struction	
Fed	deral Funds	\$8,100					
Local Match (10% of Total p		\$900	_				
Total Pro	ject Cost	\$9,000					
NDDOT Central Office On	lv						
Project Accepted?		□No	Reference Number			ID Number	
Notes			·			. <u></u>	
						Into	Page: 8 rsection ID: 9.08
						inte	Date: 10/23/2013

HIGHWAY SAFETY IN			M (HSIP) PROJE	CT APPLI	CATION			
North Dakota Department of ⁻ SFN 59959 (06-2011)	Transporta		NE/ND 32 & 62	2nd St NF	Walsh 1	5)		
Agency Name: Contact Name: Email Address:	NE/ND 02 & 02	ND	ND DOT District: 6 Telephone Number: 701-352-1530					
Please attach a location map(s).			urther describe your proj	ject				
Location Description								
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Walsh	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 820		Reduce Alcoh Increase the L Younger Drive Curb Aggressi Improvements	ol Impaired Driv Jse of Safety Re In/Older Driver S ve Driving to Address Lar nergency Medica	estraints for all Occupants	
Describe Current Safety I		Systemic Ranking	Review					
North Dakota TBD, 2008 - 2012		5	years					
Crashes Rate (per MVM)		Angle 0 0.0	K+A 0.00 0.0	_		PROTECTION		
Skew	Value No	Critical Yes	Risk Ranking	<u>—</u>				
On/Near Curve Development Near RR Crossing Distance from previous STOP Volume Cross Product	No No No Yes	Yes Yes Yes Yes ≥ 100,000	* *		Marin minima yang da			
Total Crashes	11	>0	* **	_	1 1			
Describe Proposed Safet	ty Improv	ements						
	Description	Unit Cost		Units	Cost	Notes - Seam	ent projects suggested on other	
F	Roundabout	\$1,000,000	per intersection	0	\$0.00	sheets.	on projecte daggested en eule.	
	onal Median	+,	per intersection	0	\$0.00			
Mainline Dynamic W	arning Sign ose Median		per intersection per intersection	1 0	\$50,000.00 \$0.00			
Installing S	Street Lights	\$6,000	per street light	1	\$6,000.00			
Upgrade Upgrade Ju	e Stop Sign		per sign	2	\$700.00 \$700.00			
Upgrade Stop			per sign per sign	2 2	\$900.00			
Upgrade Stop Ahe			per marking	2	\$900.00			
1 0	de Stop Bar		per marking	2	\$500.00			
Review Sigr	ns and CST	\$2,450	per intersection	0	\$0.00 \$59,700.00	_		
Signs and Markings and Street L	_ight project	costs vary by the numb	er of minor legs associate	ted with the inte				
Project Cost Estimate (at			Ü		Year of Con	struction		
	deral Funds	. ,						
Local Match (10% of Total p	oject Cost	\$5,970 \$59,700	_					
Totalii	Joet Oost	ψ55,7 00						
NDDOT Central Office On	ıly							
Project Accepted?	Yes	□No	Reference Number			ID Number		
Notes								
						Inte	Page: 9 ersection ID: 15.02 Date: 10/23/2013	

HIGHWAY SAFETY IMP			M (HSIP) PROJEC	T APPLI	ICATION		
North Dakota Department of Tra SFN 59959 (06-2011)	nsportation P	Programming					
			th St NE (Walsh	•			
Agency Name: W	alsh County	у			DOT District		
Contact Name: Sh	•			i elepi	none Number	r: 701-352-1530	
Email Address: sli Please attach a location map(s). Yo			urther describe your project				
Location Description	d may use add	antional sheets to i	ditilor describe your project				
					SHSP Er	mphasis Area (check all that apply)	
0.5			u 0700			hol Impaired Driving	
Configuration: X Configuration (2): Un		fic Control Device Street Lights				Use of Safety Restraints for all Occupants er/Older Driver Safety	
Urban/Rural: Ru		Flashers			Curb Aggress	•	
County: Wa	alsh Ma	ajor Entering ADT				s to Address Lane Departure Crashes	
Entering ADT: 14	43 Mi	nor Entering ADT	: 220			mergency Medical Capabilities to Increase Sursection Safety	ırvivabilit
				Ľ	improve inters	Section Salety	
Describe Current Safety Iss	ues & Syst	emic Ranking	Review				
North Dakota TBD, 2008 - 2012		5	years				
	Total	Angle	K+A		B 19 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Crashes	0	0	0.00				
Rate (per MVM)	0.0	0.0	0.0		看的外面。 凝		
					10000000000000000000000000000000000000		
	Value	Critical	Risk Ranking				
Skew	No	Yes				Toronto III	
On/Near Curve	No Yes	Yes Yes	_		100	(CL 25) 4 (SA)	
Development Near RR Crossing	No	Yes	^		- 2		
Distance from previous STOP	Yes	Yes	*		- 41	and the second	
Volume Cross Product	Yes	≥ 100,000	*				
Total Crashes	0	>0	***		100		
Describe Proposed Safety I	mprovemer	nts					
Des	scription	Unit Cost		Units	Cost	Notes -	
	indabout		per intersection	0	\$0.00		
Directional Mainline Dynamic Warn			per intersection per intersection	0 0	\$0.00 \$0.00		
	Median		per intersection	0	\$0.00		
Installing Stree		\$6,000	per street light	1	\$6,000.00		
Upgrade S			per sign	2	\$700.00		
Upgrade Junct Upgrade Stop Ahe			per sign per sign	2 2	\$700.00 \$900.00		
Upgrade Stop Ahead			per marking	1	\$450.00		
Upgrade S	Stop Bar		per marking	1	\$250.00		
Review Signs a	and CST	\$2,450	per intersection	0	\$0.00 \$9,000.00	<u> </u>	
Signs and Markings and Street Ligh	nt project costs	vary by the numb	er of minor legs associated	with the inte			
Project Cost Estimate (attack					d Year of Con	nstruction	
		*		-			
Federa Local Match (10% of Total proje	al Funds	\$8,100 \$900					
Total Project		\$9,000	_				
•		40,000					
NDDOT Central Office Only						lin i	
Project Accepted? Notes	Yes No		Reference Number			ID Number	
TVOIES							
						Page: 10	
						Intersection ID: 1.02	
						Data: 10/23/2013	

HIGHWAY SAFETY IN			M (HSIP) PROJ	ECT APPLI	CATION			
SFN 59959 (06-2011)			Wolob 40\ 9 4	1.464b Ave	NE (Mala	h C)		
Agency Name: Contact Name: Email Address:	Sharon L	ounty ₋ipsh	Walsh 19) & 1	ND	DOT District none Number	: 6 [*]	30	
Please attach a location map(s).			urther describe your pro	oject				
Location Description			,	,				
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Walsh	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 345		Reduce Alcoh Increase the L Younger Drive Curb Aggressi Improvements	ol Impaired Driv Jse of Safety Re In/Older Driver S ve Driving to Address Lar nergency Medica	estraints for all Occupants	
Describe Current Safety		Systemic Ranking	Review					
North Dakota TBD, 2008 - 2012		5	years					
Crashes Rate (per MVM)		Angle 0 0.0	K+A 0.00 0.0	<u> </u>	0			
Skew	Value No	Critical Yes	Risk Ranking					ı
On/Near Curve Development Near RR Crossing	No	Yes Yes Yes	*					l
Distance from previous STOP Volume Cross Product	Yes Yes	Yes ≥ 100,000	* *					l
Total Crashes	0	>0	***	_				
Describe Proposed Safet	h. Imamua.							
Describe Proposed Salet	y iiiipi ove	ments						
	Description			Units	Cost	_Notes - Qualif	ies for a street light	
	Roundabout		per intersection	0	\$0.00			
Direction Mainline Dynamic W	onal Median	+,	per intersection per intersection	0 0	\$0.00 \$0.00			
· · · · · · · · · · · · · · · · · · ·	ose Median		per intersection	0	\$0.00			
	Street Lights		per street light	0	\$0.00			
Upgrade Ju	e Stop Sign		per sign per sign	4 4	\$1,400.00 \$1,400.00			
Upgrade Stop			per sign	4	\$1,800.00			
Upgrade Stop Ahe			per marking	3	\$1,350.00			
1 0	de Stop Bar		per marking	3	\$750.00			
Review Sigr	is and CST	\$2,450	per intersection	0	\$0.00 \$6,700.00	_		
Signs and Markings and Street L	ight project	costs vary by the numb	er of minor legs associa	ated with the inte	. ,			
Project Cost Estimate (at	tach deta	iled copy)		Proposed	Year of Cons	struction		
E.	danal Finada	#C 020						
Local Match (10% of Total p	deral Funds	\$6,030 \$670						
	ject Cost		=					
	•							
NDDOT Central Office Or			I=			I.=		
Project Accepted? Notes	Yes	□ No	Reference Number			ID Number		
Notes								
							Page: 11	
						Inte	ersection ID: 6.02 Date: 10/23/2013	

LUGUWAY OA FETY III	100 0\/EI	HENT DOOD A	M (UOID) DDG I		0.1.71011		
HIGHWAY SAFETY IM North Dakota Department of 1			M (HSIP) PROJE	ECT APPLI	CATION		
SFN 59959 (06-2011)	Tarisportation	on riogramming					
		75th St N	E (Walsh 9) &	129th Ave	NE/ND 3	2	
Agency Name:					DOT District	-	
Contact Name:				Teleph	one Number	: 701-352-15	30
Email Address: Please attach a location map(s).			urther describe vour pro	aject .			
Location Description	Tou may use	s additional sheets to h	urtirer describe your pro	iject			
Configuration: Configuration (2): Urban/Rural: County: Entering ADT:	Undivided Rural Walsh	Traffic Control Device: Street Lights: Flashers: Major Entering ADT: Minor Entering ADT:	No No 1150		Reduce Alcoh Increase the U Younger Drive Curb Aggress Improvements	ol Impaired Drivi Jse of Safety Re er/Older Driver S ive Driving to Address Lan nergency Medica	straints for all Occupants
Describe Current Safety I	SSUPS & S	Systemic Ranking	Review				
North Dakota TBD, 2008 - 2012	ssues & S		years				
	Tatal	America	17. A				
Crashes	Total 0	Angle 0	0.00		# T.	- HRI MA	The same
Rate (per MVM)	0.0	0.0	0.0		Second runn	former and	
						1000	The second secon
						11	4-1-13
	Value	Critical	Risk Ranking		Men	Middle 1	
Skew On/Near Curve	No No	Yes Yes			-		
Development		Yes	*				
Near RR Crossing	No	Yes					Carlot Carlot
Distance from previous STOP Volume Cross Product	Yes Yes	Yes ≥ 100,000	*		Etter St.		
Total Crashes	0	>0	^				

Describe Proposed Safet	y Improve	ments					
-					_		
	Description Roundabout	Unit Cost \$1,000,000	per intersection	Units 0	Cost \$0.00	Notes - Segme other sheets.	ent and curve projects suggested on
	nal Median	. , ,	per intersection	0	\$0.00	Other sheets.	
Mainline Dynamic Wa			per intersection	0	\$0.00		
Clo Installing S	ose Median		per intersection per street light	0 1	\$0.00 \$6,000.00		
	e Stop Sign		per sign	2	\$700.00		
Upgrade Ju			per sign	2	\$700.00		
Upgrade Stop A Upgrade Stop Ahe	0		per sign per marking	2 1	\$900.00 \$450.00		
	de Stop Bar		per marking	1	\$250.00		
Review Sign	s and CST	\$2,450	per intersection	0	\$0.00	_	
Signs and Markings and Street L	iaht proiect c	costs vary by the numb	er of minor legs associa	ated with the inte	\$9,000.00 rsection.		
Project Cost Estimate (att					Year of Con	struction	
Гоо	deral Funds	¢ 0.400					
Local Match (10% of Total p		\$8,100 \$900					
	ject Cost	\$9,000	-				
NDDOT Control Office On	dy						
NDDOT Central Office On Project Accepted?		□No	Reference Number	I		ID Number	T
Notes						1.2 . 10111001	1
						Into	Page: 12 ersection ID: 9.06
						inte	Date: 10/23/2013

HIGHWAY SAFETY IMPRO		M (HSIP) PROJEC	T APPLI	CATION	
North Dakota Department of Transpo SFN 59959 (06-2011)	rtation Programming				
	126th Ave	NE (Walsh 14)	& 68th \$	St NE/ND	17
Agency Name: Walsh				DOT Distric	
Contact Name: Sharo	•		Telepl	hone Numbe	r: 701-352-1530
Email Address: slipsh		Conthornal constitution of the			
Please attach a location map(s). You ma Location Description	y use additional sheets to	rurtner describe your projec	t		
Location Description				SHSDE	mphasis Area (check all that apply)
					hol Impaired Driving
Configuration: T	Traffic Control Device				Use of Safety Restraints for all Occupants
Configuration (2): Undivid Urban/Rural: Rural					rer/Older Driver Safety
Orban/Rurai: Rurai County: Walsh	Flashers Major Entering ADT			Curb Aggress	is to Address Lane Departure Crashes
Entering ADT: 820	Minor Entering ADT				mergency Medical Capabilities to Increase Survivability
_	_		\checkmark		rsection Safety
Describe Current Safety Issues	& Systemic Ranking	Review			
North Dakota TBD, 2008 - 2012		5 years			
Tota	I Angle	K+A			
Crashes 0	0	0.00			
Rate (per MVM) 0.0	0.0	0.0		No.	A STATE OF THE STA
				1 10	The state of the s
				30 34 de	The same of the sa
Value	e Critical	Risk Ranking			The same of the sa
Skew Yes		★		-	THE THE PERSON OF THE PERSON O
On/Near Curve Yes	Yes	*			*** • ***/
Development No	Yes				
Near RR Crossing No Distance from previous STOP Yes	Yes	*			200
Distance from previous STOP Yes Volume Cross Product No	Yes ≥ 100,000	*		NO.	
Total Crashes 0	>0			S. S	
		***		海影影 (1)	CONTROL PROPERTY AND ADDRESS OF THE PARTY AND
Describe Proposed Safety Impr	ovements				
Descript	ion Unit Cost		Units	Cost	Notes
Descript Roundab		per intersection	0	Cost \$0.00	Notes -
Directional Med		per intersection	0	\$0.00	
Mainline Dynamic Warning S		per intersection	0	\$0.00	
Close Med		per intersection	0	\$0.00	
Installing Street Lig Upgrade Stop S		per street light per sign	0 1	\$0.00 \$350.00	
Upgrade Junction S		per sign	1	\$350.00	
Upgrade Stop Ahead S	sign \$450	per sign	1	\$450.00	
Upgrade Stop Ahead Mark		per marking	0	\$0.00 \$0.00	
Upgrade Stop I Review Signs and C		per marking per intersection	0 0	\$0.00 \$0.00	
Trovion Olymorana o	Ψ2,100	por interession		\$1,150.00	_
Signs and Markings and Street Light pro Project Cost Estimate (attach de				ersection. I Year of Cor	
Project Cost Estimate (attach de	запес сору)		Proposec	i real of Cor	isuucuon
Federal Fur	• •				
Local Match (10% of Total project co		_			
Total Project Co	ost \$1,150				
NDDOT Central Office Only					
Project Accepted?	□No	Reference Number			ID Number
Notes					
					D 40
					Page: 13 Intersection ID: 14.03
					Date: 10/23/2013

HIGHWAY SAFETY IM			M (HSIP) PROJE	CT APPL	ICATION		
North Dakota Department of T SFN 59959 (06-2011)	ransporta	tion Programming					
,		149th	n Ave NE (Wals	h 504) &	US 81		
Agency Name:	Walsh Co	ounty			DOT Distric	•	
Contact Name:		•		Telep	hone Numbe	r: 701-352-15	30
Email Address: Please attach a location map(s).			urthor describe your proje	oct			
Location Description	Tou may us	se additional sileets to i	urtiler describe your proje	:01			
					SHSP E	mphasis Area (c	heck all that apply)
0 - 1 - 1 - 1	-	To Control Desire	The Otto			nol Impaired Driv	_
Configuration: Configuration:		Traffic Control Device: Street Lights:	•			use of Safety Re er/Older Driver S	estraints for all Occupants
Urban/Rural:	Rural	Flashers			Curb Aggress		outoty
County:		Major Entering ADT					ne Departure Crashes
Entering ADT:	870	Minor Entering ADT:	: 160			mergency Medica section Safety	al Capabilities to Increase Surviv
					improve inter	section datety	
Describe Current Safety Is	ssues &						
North Dakota TBD, 2008 - 2012		5	years				
	Total	Angle	K+A			CONTROL OF THE PARTY OF THE PAR	
Crashes	0	0	0.00	_			
Rate (per MVM)	0.0	0.0	0.0	=	3	Samuel Communication of the Co	
) B	
					7	- 1	
OI	Value	Critical	Risk Ranking	_			
Skew On/Near Curve	Yes Yes	Yes Yes	*		EQ. PA	A.	0
Development	No	Yes	^		-		
Near RR Crossing	No	Yes				100	
Distance from previous STOP Volume Cross Product	No	Yes	<u>.</u>				
Total Crashes	Yes 0	≥ 100,000 >0	*				
			***	_			
Describe Proposed Safety	y Improv	ements					
F	Danasiatias	Unit Cost		Unita	Cont	Maria	
	Description toundabout		per intersection	Units 0	Cost \$0.00	Notes -	
	nal Median	. , ,	per intersection	0	\$0.00		
Mainline Dynamic Wa			per intersection	0	\$0.00		
Clo Installing St	ose Median		per intersection per street light	0 1	\$0.00 \$6,000.00		
	Stop Sign		per sign	1	\$350.00		
Upgrade Jur			per sign	1	\$350.00		
Upgrade Stop A Upgrade Stop Ahea			per sign per marking	1	\$450.00 \$450.00		
	le Stop Bar		per marking	1	\$250.00		
Review Sign	s and CST	\$2,450	per intersection	0	\$0.00		
Signs and Markings and Street Li	ight project	t costs vary by the numb	per of minor leas associate	ad with the inte	\$7,850.00		
Project Cost Estimate (att			or or minor logo dococidio		d Year of Cor	struction	
		<u> </u>					
Fed Local Match (10% of Total pr	leral Funds	. ,					
Total Pro			=				
NDDOT Central Office On		□No	Deference Number			ID Number	
Project Accepted? Notes	<u> </u>		Reference Number			ID Number	
							Page: 14
						Inte	ersection ID: 504.02

23 USC 409 NDDOT Reserves All Objections

City of Devils Lake

HIGHWAY SAFETY IMPR North Dakota Department of Tran SFN 59959 (06-2011)			PROJEC	CT APPLIC	ATION		
Agency Name:	n Ave SE fro City of Devils Lake Mike Grafsgaard	m City Lim	NI	D DOT Distric		ext 2	
	mikeg@dvlnd.com						
Please attach a location map(s). You	may use additional she	eets to further describ	e your proje	ct.			
Location Description				SUSD Emph	asis Area (check a	II that apply)	
Number:	805.01	=			I Impaired Driving	іі шат арріу)	
Local Road Name: Start:	5th Ave SE City Limit 1st St NE Urban		 □ Increase the Use of Safety Restraints for all Occupants □ Younger Driver/Older Driver Safety □ Curb Aggressive Driving □ Improvements to Address Lane Departure Crashes □ Enhancing Emergency Medical Capabilities to Increase □ Improve Intersection Safety 				
ADT:							
Lanes: Access Density Speed Limit: Length (miles):	48 25						
<u> </u>							
Describe Current Safety Issu							
North Dakota Crashes, 2008	- 2012	5	years				
			K+A	_			
	Rear End		0	-			
	Sideswipe Passing		0				
	Head On Sideswipe Opposing		0 1				
	Cidcowipe Opposing		1	-			
Describe Current Safety Issu	es & Systemic Rai	nking Review					
			Value	Critical	Star Ranking		
		ADT:	6,478	<u>></u> 10,000	*		
	Ma	jor Approach Lanes:	4	<u>></u> 4	*		
		Access Density: Speed Limit:	48 25	15 - 60 <u><</u> 40	*		
Severe	Rear End / Sideswipe		1	<u>< 40</u> <u>></u> 1	÷		
				-	****		
Describe Browned Cofety In							
Describe Proposed Safety In	iprovements						
Description 3-Lane Conversion 5-Lane Conversion Signal Revisions	Type Proactive Proactive Proactive Consider A	Cost per mi \$17,000 \$22,000 \$25,000 ccess Management i	Mileage / # 0.5 0.0 0 in the Future	Cost \$8,160 \$0 \$0 Yes	Notes - Do not of South of US 2. I projects sugges sheets.	Ped/bike	
Project Cost Estimate (attacl	n detailed conv)			Proposed V	ear of Constru	ection	
Troject Gost Estimate (attack	ractanea copy)			Troposca T	car or constru	ouon	
Local Match (10%	Federal Funds 6 of Total project cost) Total Project Cost	\$7,344 \$816 \$8,160					
Project Cost Estimate (attacl					ear of Constru	ction	
Project Accepted? Notes	□Yes □No	Reference Number -		ID Number	· <u>-</u>		
						Page: 1 Segment ID: 805.01 Date: 10/28/2013	

	AY SAFETY IMPR ota Department of Tran o (06-2011)) PROJE(CT APPLIC	ATION	
Please attac	Agency Name: Contact Name:	llege Dr fro City of Devils Lake Mike Grafsgaard mikeg@dvInd.con	e n	NI Telep	D DOT Distric phone Numbe		ext 2
	Description	Thay doo additional of	rooto to rartiror docorn	oo your projet	o		
	•				SHSP Empha	asis Area (check a	Ill that apply)
	End: City/Rural:	College Dr Hwy 19 W 14th St NE Urban Ramsey 7050 3 41 30			Increase the Use Younger Driver Curb Aggressiv Improvements	/Older Driver Safe re Driving to Address Lane Dergency Medical C	aints for all Occupants
Describe	Current Safety Issu	ies & Systemic R	anking Review				
Nort	h Dakota Crashes, 2008	Rear End Sideswipe Passing Head Or Sideswipe Opposing	3 3	K+A 1 0 0 0			
Describe	Current Safety Issu	ies & Systemic R	anking Review				
Describe			ADT: lajor Approach Lanes: Access Density: Speed Limit:	3 41 30	Critical ≥ 10,000 ≥ 4 15 - 60 ≤ 40 ≥ 1	Star Ranking * * *	
		•				***	
Describe	Proposed Safety In Description 3-Lane Conversion 5-Lane Conversion Signal Revisions	Type Proactive Proactive Proactive Proactive	Cost per mi \$17,000 \$22,000 \$25,000 Access Management	Mileage / # 0.2 0.0 1 in the Future	Cost \$2,975 \$0 \$25,000 No	Notes -	
D : (0					5 ()		
Project C	Local Match (109	Federal Funds 6 of Total project cost 7 Total Project Cost	\$2,798		Proposed Y	ear of Constru	iction
Proiect C	ost Estimate (attaci	h detailed copy)			Proposed Y	ear of Constru	ıction
,,,,,	Project Accepted? Notes	□Yes □No	Reference Number -		ID Number		Page: 2 Segment ID: 834.03
							Date: 10/28/2013

HIGHWAY SAFETY IMPF North Dakota Department of Trar SFN 59959 (06-2011)	ROVEMENT PRoportation Programo	OGRAM (HSIP)	PROJEC	CT APPLIC	ATION	
	Callaga Dr	f==== 11C 0 4	- I b.a.	40\M/ D=0	ioot	
		from US 2 t				
	City of Devils Lake)		D DOT Distric	-	
	Mike Grafsgaard		Telep	hone Number	r: 701-662-7600	ext 2
	mikeg@dvlnd.com					
Please attach a location map(s). You	ı may use addıtional st	neets to further describ	e your proje	ct.		
Location Description				OLIOD E		II di a Cara di A
Number:	924.02	•			asis Area (check al I Impaired Driving	ii that appiy)
Local Road Name:						aints for all Occupants
	US 2				Older Driver Safe	'
	Hwy 19W			Curb Aggressiv		•)
City/Rural:	•				to Address Lane D	eparture Crashes
County:	Ramsey					apabilities to Increase
			✓	Improve Interse	ection Safety	
ADT:						
Lanes:						
Access Density						
Speed Limit: Length (miles):						
Lerigur (miles).	1.5					
Describe Current Safety Issu	ios & Systemic R	ankina Roviow				
North Dakota Crashes, 2008	•		years			
Horiii Bakota Gradileo, 2000	2012	· ·	youro			
			K+A			
	Rear End		1	-		
	Sideswipe Passing		0			
	Head On		0			
	Sideswipe Opposing		0	_		
			1			
- "						
Describe Current Safety Issu	ies & Systemic Ra	anking Review				
			Value	Critical	Star Ranking	
·		ADT:	3,431	> 10,000	Otal Italiking	
	М	ajor Approach Lanes:	4	<u>≥</u> 10,000 ≥ 4	*	
		Access Density:	30	15 - 60		
		Speed Limit:	30	<u><</u> 40	*	
Severe	e Rear End / Sideswip	e / Head On Crashes:	1	<u>></u> 1		
·					**	
Describe Proposed Safety In	nprovements					
	-	0	NASI - · · · · · · · ·	0	Materia Billi	
Description 3-Lane Conversion	, , , , , , , , , , , , , , , , , , ,	Cost per mi	Mileage / #	Cost \$22,100	Notes - Right ar	•
5-Lane Conversion 5-Lane Conversion		\$17,000 \$22,000	1.3 0.0	\$22,100 \$0	ped/bike project	00
Signal Revisions		\$25,000	2	\$50,000	on other sheets.	•
Signal Nevisions		Access Management				
					_	
Project Cost Estimate (attack	h detailed copy)			Proposed Y	ear of Constru	ıction
	Federal Funds					
Local Match (109	% of Total project cost)					
	Total Project Cost	\$72,100				
Dunings Cont Entire state (att	b dotailed comm			Duestant	(aau af Ot	otion
Project Cost Estimate (attack		Deference Number			ear of Constru	ICTION
Project Accepted? Notes	☐ Yes ☐ No	Reference Number -		ID Number	<u>-</u>	
140162						
						Page: 3
						Segment ID: 834.02 Date: 10/28/2013

HIGHWAY SAFETY IMPR North Dakota Department of Tran SFN 59959 (06-2011)			PROJEC	CT APPLICA	ATION	
10th	Ave SE from	17th St SE				
Contact Name:	City of Devils Lake Mike Grafsgaard mikeg@dvInd.com			D DOT District hone Number	t: 3 r: 701-662-7600	ext 2
Please attach a location map(s). You		eets to further describ	e vour proied	ct.		
Location Description	may acc additional con-		o you. p. ojo			
				SHSP Empha	sis Area (check a	all that apply)
End: City/Rural:	10th Ave SE 17th St SE Frontage Rd			Increase the Us Younger Driver, Curb Aggressiv Improvements t	/Older Driver Safe e Driving o Address Lane [aints for all Occupants
ADT: Lanes: Access Density Speed Limit: Length (miles):	2 82 25			Improve Interse		
Describe Current Safety Issu	es & Systemic Ra	nkina Review				
North Dakota Crashes, 2008			years			
			K+A			
	Rear End		0			
	Sideswipe Passing Head On		0 0			
	Sideswipe Opposing		0			
	Cideowipe Opposing		0	•		
Describe Current Safety Issu	es & Systemic Ra	nking Review				
				0 1	0(
		ADT:	Value 528	Critical > 10,000	Star Ranking	-
	Ma	jor Approach Lanes:	2	≥ 10,000 ≥ 4		
	Wid	Access Density:	82	15 - 60	*	
		Speed Limit:	25	<u><</u> 40	*	
Severe	e Rear End / Sideswipe	/ Head On Crashes:	0	<u>></u> 1		_
·					**	•
Describe Proposed Safety In	nprovements					
Decembries	T	0	M:1/#	04	Notes -	
Description 3-Lane Conversion	Type Proactive	Cost per mi \$17,000	Mileage / # 0.5	Cost \$8,500	Notes -	
5-Lane Conversion	Proactive	\$22,000	0.0	\$0		
Signal Revisions	Proactive	\$25,000	0	\$0		
	Consider A	ccess Management	in the Future	Yes	_	
Project Cost Estimate (attacl	h detailed copy)			Proposed Y	ear of Constru	uction
	E. 1. 1. E. 1.	Φ 7 .050				
Local Match (109	Federal Funds 6 of Total project cost)	\$7,650 \$850				
Local Match (107	Total Project Cost	\$8,500				
	,					
Project Cost Estimate (attack				Proposed Y	ear of Constru	uction
Project Accepted?	☐ Yes ☐ No	Reference Number -		ID Number	-	-
Notes						
						_
						Page: 4 Segment ID: 807.01 Date: 10/28/2013

HIGHWAY SAFETY IMPR North Dakota Department of Trar SFN 59959 (06-2011)	ROVEMENT PR asportation Program	OGRAM (HSIP) ming	PROJE	CT APPLIC	ATION	
Agency Name: Contact Name:	City of Devils Lak Mike Grafsgaard mikeg@dvlnd.com	n	N Telep	D DOT District ohone Number		ext 2
Location Description	i may use additional s	neets to turther describ	e your proje	Ci.		
Location Bosonpaion				SHSP Empha	asis Area (check a	Il that apply)
End: City/Rural:	5th St SE College Dr S 12th Ave SE Urban Ramsey 1333 2 60 25			Reduce Alcoho Increase the Us Younger Driver. Curb Aggressiv Improvements t	I Impaired Driving se of Safety Restra /Older Driver Safe e Driving to Address Lane Dergency Medical C	aints for all Occupants
Describe Current Safety Issu	ies & Systemic R	anking Review				
North Dakota Crashes, 2008			years			
			K+A	_		
	Rear End		0			
	Sideswipe Passing Head O		0 0			
	Sideswipe Opposing		0			
			0	_		
Describe Current Safety Issu	ios & Systomic B	ankina Poviow				
Describe Current Safety Issu	ies & systemic R	alikilig Review				
			Value	Critical	Star Ranking	
		ADT:	1,333	<u>></u> 10,000		
	N	flajor Approach Lanes: Access Density:	2 60	<u>≥</u> 4 15 - 60	+	
		Speed Limit:	25	<u><</u> 40	*	
Severe	e Rear End / Sideswip	e / Head On Crashes:	0	<u>></u> 1		
	•				**	
Describe Proposed Safety In	nprovements					
,	•					
Description	Туре	Cost per mi	Mileage / #	Cost	Notes -	
3-Lane Conversion 5-Lane Conversion	Proactive Proactive	\$17,000 \$22,000	0.8 0.0	\$13,600 \$0		
Signal Revisions	Proactive	\$25,000	0.0	\$0 \$0		
	Consider	Access Management	in the Future	Yes		
Project Cost Fatimete (attack	h datailed comu			Drangady	on of Constru	.atiam
Project Cost Estimate (attack	п аетанеа сору)			Proposea Y	ear of Constru	ICTION
Local Match (109	Federal Fund: % of Total project cost Total Project Cos	\$1,360				
Project Cost Estimate (attack	h detailed copy)			Proposed Y	ear of Constru	ıction
Project Accepted?	☐Yes ☐No	Reference Number -		ID Number		
Notes						
						D
						Page: 5 Segment ID: 808.01 Date: 10/28/2013

HIGHWAY SAFETY IMPI North Dakota Department of Tra SFN 59959 (06-2011)	ROVEMENT PR nsportation Program	OGRAM (HSIP) ming	PROJEC	CT APPLIC	ATION	
2 rd	St NE from	Pailroad Av	o to 6t	h Ava NE	E Project	
		Railroad Av				
Contact Name:	: City of Devils Lak : Mike Grafsgaard			D DOT Distric	t: 3 r: 701-662-7600	ext 2
	: mikeg@dvlnd.con			. 4		
Please attach a location map(s). You	u may use additional s	neets to further describ	e your proje	Ct.		
Location Description				CLICD Emph	ooia Araa (abaal) a	II that annly
Number:	813.01				asis Area (check a I Impaired Driving	
Local Road Name:						aints for all Occupants
	Railroad Ave				Older Driver Safe	•
	6th Ave NE			Curb Aggressiv		7
City/Rural:	Urban					Departure Crashes
County:	Ramsey			Enhancing Eme	ergency Medical C	apabilities to Increase
			✓	Improve Interse	ection Safety	
	2045					
Lanes:						
Access Density						
Speed Limit: Length (miles):						
Lengin (miles).	0.2					
Describe Current Safety Issue	uas & Systamic R	ankina Roviow				
North Dakota Crashes, 2008	~	-	years			
North Bartota Gracines, 2000	2012	· ·	youro			
			K+A			
	Rear End	b	0	-		
	Sideswipe Passing	g	0			
	Head Or		0			
	Sideswipe Opposing	g	0	_		
			0			
- "						
Describe Current Safety Issu	ues & Systemic R	anking Review				
			Value	Critical	Star Ranking	
-		ADT:	2,045	> 10,000	Star Ranking	•
	N	Major Approach Lanes:	2	<u>≥</u> 10,000 ≥ 4		
		Access Density:	80	15 - 60	*	
		Speed Limit:	25	<u><</u> 40	*	
Sever	e Rear End / Sideswip	e / Head On Crashes:	0	<u>></u> 1		
					**	
D						
Describe Proposed Safety In	nprovements					
Doggrintion	T	Cost par mi	Miloago / #	Cost	Notes -	
Description 3-Lane Conversion	· · · · · · · · · · · · · · · · · · ·	Cost per mi \$17,000	Mileage / #	\$3.400	Notes -	
5-Lane Conversion		\$22,000	0.0	\$0		
Signal Revisions		\$25,000	0	\$0		
Ŭ		Access Management	in the Future	Yes		
Project Cost Estimate (attac	h detailed copy)			Proposed Y	ear of Constru	ıction
	Federal Funds					
Local Match (10	% of Total project cost Total Project Cos					
	Total Floject Cos	τ φ3,400				
Project Cost Estimate (attac	h detailed copy)			Proposed V	ear of Constru	ıction
Project Accepted?	☐Yes ☐No	Reference Number -		ID Number		iouon
Notes						•
·						. Pago: 6
						Page: 6 Segment ID: 813.01
						Date: 10/28/2013

HIGHWAY North Dakota SFN 59959 (0	Department of Tran	OVEMENT Posportation Progra	ROGRAM (HSIP) PROJE(CT APPLIC	ATION	
Places attacks	Agency Name: Contact Name: Email Address:	City of Devils La Mike Grafsgaard mikeg@dvlnd.co		N Telep	D DOT Distric	-	ext 2
Location De		may use additional	sneets to turther descri	be your proje	Ct.		
Location De	23011ption				SHSP Empha	asis Area (check a	Il that apply)
		7th St NE College Dr N 12th Ave NE Urban Ramsey 1443 2 80 25			Reduce Alcoho Increase the Us Younger Driver Curb Aggressiv Improvements	I Impaired Driving se of Safety Restra /Older Driver Safe re Driving to Address Lane Dergency Medical C	aints for all Occupants
Describe Co	urrent Safety Issu	es & Systemic	Ranking Review				
	Oakota Crashes, 2008			years			
		Rear E Sideswipe Passi Head (Sideswipe Opposi	ing On	K+A 0 0 0 0 0	-		
			D // D /				
Describe Co	urrent Safety Issu		ADT: Major Approach Lanes: Access Density: Speed Limit: ripe / Head On Crashes:	2 80 25	Critical ≥ 10,000 ≥ 4 15 - 60 ≤ 40 ≥ 1	Star Ranking * *	
						* *	
Describe Pr	Description 3-Lane Conversion 5-Lane Conversion Signal Revisions	Type Proactive Proactive Proactive	Cost per mi \$17,000 \$22,000 \$25,000 er Access Management	Mileage / # 0.8 0.0 1 in the Future	\$13,600 \$0 \$25,000	_ Notes -	
Project Cos	t Estimate (attacl	n detailed copy			Proposed Y	ear of Constru	ıction
_		Federal Fun 6 of Total project co Total Project Co	ds \$34,740 st) \$3,860	-	1500001	ou. o. oonoue	
Project Cos	t Estimate (attacl	detailed copy			Proposed Y	ear of Constru	ıction
-	Project Accepted? Notes	Yes No	Reference Number -		ID Number	-	Page: 7 Segment ID: 817.01
							Segment ID: 817.01 Date: 10/28/2013

	SAFETY IMPR Department of Tran 06-2011)			PROJEC	CT APPLIC	ATION		
	,	ve SE from	Frontage R	d to W	alnut St	SE Projec	ct	
	Agency Name: Contact Name:	City of Devils Lake Mike Grafsgaard mikeg@dvlnd.com		NI	D DOT Distric			
Please attach	a location map(s). You			e your proje	ct.			
Location D	escription							
	N I	040.04				asis Area (check a		
					Increase the Us Younger Driver	I Impaired Driving se of Safety Restroicy Older Driver Safette on Driving	aints for all Occ	cupants
	City/Rural: County:	Urban			Enhancing Eme	to Address Lane [ergency Medical C	•	
	ADT: Lanes:			V	Improve Interse	ection Safety		
	Access Density Speed Limit: Length (miles):	25						
	Lengar (miles).	0.5						
	current Safety Issu Dakota Crashes, 2008	•		years				
		5 5 1		K+A				
		Rear End		0				
		Sideswipe Passing Head On		0 0				
		Sideswipe Opposing		0				
	•			0	-			
Describe C	urrent Safety Issu	es & Systemic Ra	nkina Review					
Describe 0	urrent Galety 1334	es a dysteille ne	inking Keview					
			ADT:	Value 3,270	Critical > 10,000	Star Ranking	_	
		Ma	ajor Approach Lanes:	2	≥ 10,000 ≥ 4			
			Access Density:	60	15 - 60	*		
	•	5 5 1/0:1	Speed Limit:	25	<u>≤</u> 40	*		
•	Severe	Rear End / Sideswipe	e / Head On Crashes:	0	<u>></u> 1	**	=	
		•				^ ^		
Describe P	roposed Safety In	provements						
	Description	Type	Cost per mi	Mileage / #	Cost	Notes -		
•	3-Lane Conversion	Proactive	\$17,000	0.5	\$8,500	_		
	5-Lane Conversion	Proactive	\$22,000	0.0	\$0			
	Signal Revisions	Proactive Consider	\$25,000 Access Management	0 in the Future	\$0 Yes			
			nesses management			_		
Project Co	st Estimate (attacl				Proposed Y	ear of Constru	uction	
	Local Match (400	Federal Funds 6 of Total project cost)	\$7,650 \$850					
	Local Match (107	Total Project Cost						
Project Co	st Estimate (attacl					ear of Constru	uction	
	Project Accepted? Notes	☐ Yes ☐ No	Reference Number -		ID Number	· -	_	
	140162							
							_ Page:	8
							Segment ID: Date:	810.01 10/28/2013

HIGHWAY SAFETY IMPR North Dakota Department of Trai SFN 59959 (06-2011)	ROVEMENT PF nsportation Progran	ROGRAM (HSIP) nming	PROJEC	CT APPLIC	ATION	
1241	Avo NE fr	om Walnut S	t E to '	7th C t NI	- Project	
		om Walnut S		D DOT Distric	- Project	
Contact Name:	: City of Devils Lak : Mike Grafsgaard : mikeg@dvInd.co				r: 701-662-7600	ext 2
Please attach a location map(s). You			e vour proie	ct.		
Location Description			, , , ,			
•					asis Area (check a	II that apply)
End: City/Rural: County:	12th Ave NE Walnut St E 7th St NE Urban Ramsey			Reduce Alcoho Increase the Us Younger Driver Curb Aggressiv Improvements	I Impaired Driving se of Safety Restra /Older Driver Safe re Driving to Address Lane Dergency Medical C	aints for all Occupants
Speed Limit:	25					
Length (miles):	0.5					
December Comment Office		Damisina Davis				
Describe Current Safety Issu North Dakota Crashes, 2008	•		vooro			
North Dakota Crashes, 2008	1 - 2012	э	years			
			K+A			
	Rear En	d	0	•		
	Sideswipe Passin	-	0			
	Head O		0			
	Sideswipe Opposir	<u>lg</u>	0	-		
			O			
Describe Current Safety Issue	ues & Systemic F	Ranking Review				
		ADT:	Value 1,022	Critical > 10,000	Star Ranking	
	Ī	Major Approach Lanes:	2	≥ 10,000 ≥ 4		
		Access Density:	58	15 - 60	*	
_		Speed Limit:	25	<u><</u> 40	*	
Sever	e Rear End / Sideswi	pe / Head On Crashes:	0	<u>></u> 1	**	
	•				* *	
Describe Proposed Safety In	mprovements					
,	•					
Description	, , , , , , , , , , , , , , , , , , ,	Cost per mi	Mileage / #	Cost	Notes -	
3-Lane Conversion 5-Lane Conversion		\$17,000 \$22,000	0.5 0.0	\$8,500 \$0		
Signal Revisions		\$25,000	1	\$25,000		
		r Access Management	in the Future	Yes	<u></u>	
					_	
Project Cost Estimate (attac	h detailed copy)			Proposed Y	ear of Constru	iction
	Federal Fund	ls \$30,150				
Local Match (10	% of Total project cos					
	Total Project Cos	st \$33,500				
Dunings Cont Follows to 4.44	h dotoile (: .)			Duame and M	/	
Project Cost Estimate (attac Project Accepted?		Reference Number -		ID Number	ear of Constru	ICTION
Notes	☐ Yes ☐ No	Mercrence Muniber -		ib indiliber		
						Page: 9
						Segment ID: 822.01 Date: 10/28/2013

HIGHWAY SAFETY IMPR North Dakota Department of Tran SFN 59959 (06-2011)			PROJEC	CT APPLIC	ATION	
	d Ave NE fro	m 4th St N	F to 6t	h St NF	Project	
Agency Name: Contact Name:	City of Devils Lake Mike Grafsgaard mikeg@dvlnd.com		NI	D DOT Distric		ext 2
Please attach a location map(s). You		eets to further describ	oe your proje	ct.		
Location Description	·					
,	0.4.0.0.4				asis Area (check a	11 7/
	3rd Ave NE 4th St NE 6th St NE Urban Ramsey			Increase the Use Younger Driver Curb Aggressiv Improvements	COlder Driver Safe ve Driving to Address Lane D ergency Medical C	aints for all Occupants
Access Density						
Speed Limit: Length (miles):	25					
		5 .				
Describe Current Safety Issu North Dakota Crashes, 2008			years			
Notifi Dakota Grasiles, 2000	- 2012	3	K+A			
-	Rear End		0	-		
	Sideswipe Passing		0			
	Head On		0			
-	Sideswipe Opposing		0	-		
Describe Current Safety Issu	es & Systemic Ra	nking Review				
			Value	Critical	Star Ranking	
	Ma	ADT: ijor Approach Lanes:	1,082 2	≥ 10,000 ≥ 4		
	IVIC	Access Density:	110	<u>≥</u> - 15 - 60	*	
		Speed Limit:	25	<u><</u> 40	*	
Severe	Rear End / Sideswipe	/ Head On Crashes:	0	<u>></u> 1	**	
	•					
Describe Proposed Safety Im	provements					
Description	Type	Cost per mi	Mileage / #	Cost	Notes -	
3-Lane Conversion	Proactive	\$17,000	0.1	\$1,700		
5-Lane Conversion Signal Revisions	Proactive Proactive	\$22,000 \$25,000	0.0 0	\$0 \$0		
		Access Management				
Project Cost Estimate (attach	detailed conv)			Proposed V	ear of Constru	ıction
Project Cost Estimate (attach	i detailed copy)			rioposeu i	ear or constru	iction
Local Match (10%	Federal Funds 6 of Total project cost) Total Project Cost	\$1,530 \$170 \$1,700				
Project Cost Estimate (attach	n detailed copy)			Proposed Y	ear of Constru	ıction
Project Accepted? Notes	☐ Yes ☐ No	Reference Number -		ID Number	r -	
						Page: 10 Segment ID: 819.01 Date: 10/28/2013

HIGHWAY SAFE North Dakota Departr SFN 59959 (06-2011)	nent of Tran	SOVEMENT Pasportation Progra	ROGI	RAM (HSIP)	PROJEC	CT APPLIC	ATION		
	104	n Ave NE f	irom	7th St N	E to 10	th St NE	Project		
Λαο		City of Devils La		/ till St N		D DOT Distric			
Con	tact Name:	Mike Grafsgaard mikeg@dvlnd.c	d				r: 701-662-7600	ext 2	
Please attach a location				to further describ	be your proje	ct.			
Location Descripti									
							asis Area (check a		
	Start: End: City/Rural:	10th Ave NE 7th St NE 10th St NE Urban Ramsey				Increase the Use Younger Driver Curb Aggressiv Improvements	Older Driver Safe re Driving to Address Lane Dergency Medical C	aints for all Occupa	
	Speed Limit:								
Le	ngth (miles):	0.2							
D") - f - f - f	0.0							
Describe Current S North Dakota Ci			Ranki	_	years				
NOTH Dakota Ci	asries, 2006	- 2012		5	years				
					K+A	_			
		Rear E			0				
		Sideswipe Pass	-		0				
		Head Sideswipe Oppos			0 0				
	,	опасоміре орроз	ni ig		0	-			
Describe Current S	Safety Issu	ies & Systemic	Ranki	ng Review					
					Value	Critical	Star Ranking		
				ADT:	,	<u>≥</u> 10,000		•	
			,	Approach Lanes:		≥ 4	_		
				Access Density: Speed Limit:		15 - 60 <u><</u> 40	*		
	Severe	Rear End / Sidesv	vipe / He	•	_	<u> </u>			
							**	•	
Describe Propose	d Cafaty In	anrovomonto							
Describe Proposed	ı Salety III	iprovements							
	Description	Type		Cost per mi	Mileage / #	Cost	Notes -		
	Conversion	Proactive		\$17,000	0.2	\$3,400			
	Conversion al Revisions	Proactive Proactive		\$22,000 \$25,000	0.0 0	\$0 \$0			
Gigi	iai itoviololio		der Acce	ss Management					
							_		
Project Cost Estim	ate (attacl	n detailed copy)			Proposed Y	ear of Constru	ıction	
		Federal Fur	nds	\$3,060					
Loc	al Match (10%	6 of Total project co		\$340					
	,	Total Project Co		\$3,400	•				
Project Cost Estin	ato (attacl	h detailed conv	1			Proposed V	ear of Constru	ıction	
	Accepted?	☐Yes ☐No		erence Number -		ID Number		icuon	
	ites			3		.2			
								Page:	11
									24.01 28/2013

HIGHWAY SAFETY IMPR North Dakota Department of Trar SFN 59959 (06-2011)	ROVEMENT PRO Insportation Programm	OGRAM (HSIP) ning	PROJEC	CT APPLIC	ATION	
Agency Name: Contact Name:	I St NE from City of Devils Lake Mike Grafsgaard mikeg@dvlnd.com	ı	NI Telep	D DOT District hone Number	-	ext 2
Location Description	ı may use addıtıonai sn	eets to turther describ	oe your projed	Ct.		
Location Description				SHSP Empha	asis Area (check a	Il that apply)
End: City/Rural:	2nd St NE 5th Ave NE 6th Ave NE Urban Ramsey 365 2 90 25			Reduce Alcohol Increase the Us Younger Driver, Curb Aggressiv Improvements t	I Impaired Driving se of Safety Restra /Older Driver Safe e Driving to Address Lane Dergency Medical C	aints for all Occupants
Describe Current Safety Issu	ies & Systemic Ra	nking Review				
North Dakota Crashes, 2008	•		years			
	Dan Fud		K+A	-		
	Rear End Sideswipe Passing Head On Sideswipe Opposing		0 0 0 0			
Describe Current Safety Issu	ies & Systemic Ra	nnking Review	Malara	Oniti a a l	Ctor Donking	
Severe	Ma e Rear End / Sideswipe	ADT: ajor Approach Lanes: Access Density: Speed Limit: e / Head On Crashes:	2 90	Critical ≥ 10,000 ≥ 4 15 - 60 ≤ 40 ≥ 1	Star Ranking * *	
					^ ^	
Describe Proposed Safety In	nprovements					
Description 3-Lane Conversion 5-Lane Conversion Signal Revisions	Proactive Proactive Proactive	Cost per mi \$17,000 \$22,000 \$25,000 Access Management	Mileage / # 0.1 0.0 0 in the Future	Cost \$1,700 \$0 \$0 Yes	_Notes -	
Project Cost Estimate (attack	h detailed copy)			Proposed Y	ear of Constru	ıction
	Federal Funds % of Total project cost) Total Project Cost	\$1,530 \$170 \$1,700				
Project Cost Estimate (attack	h detailed copy)			Proposed Y	ear of Constru	ıction
Project Accepted? Notes	☐Yes ☐No	Reference Number -		ID Number	<u>-</u>	
						Page: 12 Segment ID: 812.01 Date: 10/28/2013

				IP) PROJECT APPLIC	CATION									
North Dako SFN 59959	ta Department of Trans (06-2011)	portation Programm	ing											
	Right Angle Crashes @ Signals Intersection Improvements Intersections on US 2 from Summer St NW to Hwy 19W Agency Name: City of Devils Lake ND DOT District: 3 Contact Name: Mike Grafsgaard Right Angle Crashes @ Signals Intersection Improvements ND DOT Summer St NW to Hwy 19W ND DOT District: 3 Telephone Number: 701-662-7600 ext 2													
	Email Address: n	nikeg@dvlnd.com		•	e Number: 7	U1-002-70UU 6	ext 2							
	h a location map(s). You r Description	nay use additional she	ets to further des	scribe your project.										
	SHSP Emphasis Area (check all that apply) Corridor 832.01													
5	North Dakota Crashes, 2			5 Years										
Intersection	Proposed Safety Imp Street Name	Cross Street	Confin	Toffic Control Enterting ADT	Major e	Severe Crashes	Severe RA	Confirmation	Notes					
ID 825.01	Summer St NW	US 2	Config	Taffic Control Enterting ADT Thru-STOP 2,440	Config Undivided	0	Crashes 0	Lights 0	Ped/bike projects suggested on other sheets.					
832.01	US 2	Hwy 19 W	x	Signal 7,830	Divided	1	0	1	Ped/bike projects suggested on other sheets.					
Describe	Current Safety Issue				years									
		Intersection Criteria	rar Banota Gradi		•									
	Traffic Control Device	Signal		Description Confirmation Lights		Cost er intersection	Quanity 1	Total Cost \$1,000						
	Entering ADT	>7,500		Unsignalized and Divided Access Management	\$300,000 p		2.0	\$600,000						
	Road Geometry	Divided		*Corridor includes 2 miles of di	vided roadway			\$601,000						
	Severe Crashes	>0												
Project C	ost Estimate (attach	detailed copy)			Proposed \	ear of Cons	truction							
		Federal Funds	\$540,900											
	Local Match (10%	of Total project cost)	\$60,100	_										
	Т	otal Project Cost	\$601,000											
NDDOT C	entral Office Only													
	Project Accepted?													
	Notes													
								_	,					
								Page: Intersection ID:	1 832.01					
								Date:	10/28/2013					

HIGHWA	Y SAFETY IMPR	OVEMENT PRO	GRAM (HS	SIP) PROJECT APPLIC	ATION										
	North Dakota Department of Transportation Programming														
3FN 39939	Right Angle Crashes @ Signals Intersection Improvements Intersections on US 2 from Hwy 19W to College Dr														
			Inte				/ to Col	lege Dr							
	Agency Name: (Contact Name: N	City of Devils Lake			T District	:: 3 :: 701-662-7600 e	v+ 2								
	Email Address: r	nikeg@dvlnd.com		•	e Number	. 701-002-7000 €	3X								
	h a location map(s). You	may use additional shee	ts to further de	scribe your project.											
Location	SHSP Emphasis Area (check all that apply)														
	SHSP Emphasis Area (check all that apply) Corridor 832.02														
	Street Name US 2 ☐ Increase the Use of Safety Restraints for all Occupants														
	Urban/Rural: Urban ☐ Younger Driver/Older Driver Safety County: Ramsey ☐ Curb Aggressive Driving														
	Length 1.4 ☐ Improvements to Address Lane Departure Crashes														
	☐ Enhancing Emergency Medical Capabilities to Increase ☐ Improve Intersection Safety														
Docaribo	North Dakota Crashes, 2008 - 2012 5 Years scribe Proposed Safety Improvements														
Intersection		Cross Street	Config	Taffic Control Enterting ADT	Major	Severe Crashes	Severe RA	Confirmation	Notes						
ID 832.02	US 2	College Dr	X	Signal 11,708	Config Divided	Severe Crasnes	Crashes 0	Lights 1	Ped/bike projects suggested on other sheets.						
032.02	032	College Di	^	Olgridi 11,700	Divided	3	U		r earbine projects suggested on other sneets.						
Describe	Current Safety Issue				years										
		Intersection Criteria	in Danota Orac		-										
	Traffic Control Device	Signal		Description Confirmation Lights		Unit Cost 0 per intersection	Quanity 1	Total Cost \$1,000							
	Entering ADT	>7,500		Unsignalized and Divided		0 per mile	0.0	\$0							
	Road Geometry	Divided		*Corridor includes miles of divi		·		\$1,000							
	Severe Crashes	>0				,									
Project Co	ost Estimate (attach	detailed conv			Propose	d Year of Cons	truction								
1 10,000	oot Lotimate (attach	••/			Поросс	a rear or come	u uouon								
	Local Match (10%	Federal Funds of Total project cost)	\$900 \$100												
		otal Project Cost	\$1,000	_											
NDDOTO	entral Office Only														
NDDOTC		□Yes □No	Ref	erence Number -	ID Number	-									
	Notes							_							
	-							Page:	2						
								Intersection ID:	832.02						
								Date:	10/28/2013						

HIGHWA	HIGHWAY SAFETY IMPROVEMENT PROGRAM (HSIP) PROJECT APPLICATION														
North Dakota Department of Transportation Programming SFN 59959 (06-2011)															
0111 00000	Right Angle Crashes @ Signals Intersection Improvements Intersections on US 2 from College Dr to 12th Ave SE														
	A N	Olfer of Devello Labor	Inters	sections on US	2 from (OOT District	College Dr	r to 12t	h Ave SE							
		City of Devils Lake Mike Grafsgaard				: 3 : 701-662-7600 e	xt 2								
Diagon office		mikeg@dvlnd.com	to to finithon do	·											
	n a location map(s). You Description	may use additional shee	ets to turtner de	scribe your project.											
	SHSP Emphasis Area (check all that apply)														
	Corridor 832.03 Reduce Alcohol Impaired Driving														
	Street Name US 2 ☐ Increase the Use of Safety Restraints for all Occupants Urban/Rural: Urban ☐ Younger Driver/Older Driver Safety														
	County: Ramsey														
	Length 2.0														
	☐ Enhancing Emergency Medical Capabilities to Increase ☑ Improve Intersection Safety														
	North Dakota Crashes, 2008 - 2012 5 Years														
	Proposed Safety Im	provements													
Intersection ID	Street Name	Cross Street	Config	Taffic Control Enterting AD	T Major Config	Severe Crashes	Severe RA Crashes	Confirmation Lights	Notes						
805.01 806.01	5th Ave SE 8th Ave SE	US 2 US 2	X X	Signal 8,750 Thru-STOP 6,303	Divided Divided	0 0	0	1 0	None						
807.01	10th Ave SE	US 2	X	Thru-STOP 4,935	Divided	0	0	0	None None						
810.01	12th Ave SE	US 2	Х	Thru-STOP 7,165	Undivided	0	0	0	None						
Describe (Current Safety Issu	es & Systemic Ran	kina Reviev	,											
		Nor			5 years										
	Traffic Control Device	Intersection Criteria Signal		Description	U	nit Cost	Quanity	Total Cost							
	Entering ADT	>7,500		Confirmation Light	ts \$1,000	per intersection	1	\$1,000							
	Road Geometry	Divided		Unsignalized and Divide Access Manageme) per mile	0.0	\$0							
	Severe Crashes	>0		*Corridor includes miles of d	ivided roadwa	y.		\$1,000							
Project Co	ost Estimate (attach	n detailed copy)			Proposed	d Year of Cons	truction								
		Federal Funds	\$900												
		of Total project cost) Total Project Cost	\$100 \$1,000	=											
		rotai r roject cost	φ1,000												
NDDOT C	entral Office Only	n. n.	D-4	North	ID Noveless										
	Project Accepted? Notes	Yes No	Kei	erence Number -	ID Number	-		_							
									3						
								Intersection ID: Date:	832.03 10/28/2013						
								Date:	10/20/2013						

	Y SAFETY IMPR			SIP) PROJECT	APPLIC	ATION									
	lorth Dakota Department of Transportation Programming SFN 59959 (06-2011)														
	,		lustana				ntersection Impr		Ll 40\A	,					
	Agency Name: C	ity of Devils Lake	inters	ections on		e pr fr T District:		t SE to	Hwy 19W						
	Contact Name: N	like Grafsgaard					701-662-7600 e	xt 2							
Please attac	Email Address: n n a location map(s). You r	nikeg@dvlnd.com	ts to further de	scribe vour project											
	Description	nay acc additional circo	10 10 14/11/01 40	ooniso your project.											
						CUCD Empl	onio Aron (aboni	all that anni.							
	Corridor 8				□F	Reduce Alco	nasis Area (check hol Impaired Drivir	ng							
	Street Name College Dr □ Increase the Use of Safety Restraints for all Occupants Urban/Rural: Urban □ Younger Driver/Older Driver Safety														
	County: Ramsey Curb Aggressive Driving														
	Length 1.3 ☐ Improvements to Address Lane Departure Crashes ☐ Enhancing Emergency Medical Capabilities to Increase														
	☐ Enhancing Emergency Medical Capabilities to Increase ☐ Improve Intersection Safety														
	North Dakota Crashes,	2008 - 2012		5 Yea	rs										
	Proposed Safety Imp	orovements				Na-i		O DA	Ozafianatian						
Intersection ID	Street Name	Cross Street	Config	Taffic Control Ente		Config	Severe Crashes	Severe RA Crashes	Confirmation Lights	Notes					
808.01 833.01	5th St SE US 2	College Dr S College Dr	T T			Undivided Undivided	0	0	0 1	Segment and ped/bike projects suggested on other sheets. Segment and ped/bike projects suggested on other sheets.					
033.01	002	College Di		Olgilai	3,210	Ondivided	Ü	U	•	Segment and pediblike projects suggested on other sneets.					
Describe	Current Safety Issue			hes, 2008 - 2012	5 v	ears									
		Intersection Criteria	in Dakola Cras		,										
	Traffic Control Device	Signal		Description	n tion Lights		it Cost per intersection	Quanity 1	Total Cost \$1,000						
	Entering ADT	>7,500		Unsignalized a	nd Divided	\$300,000		0.0	\$0						
	Road Geometry	Divided		*Corridor includes 0					\$1,000						
	Severe Crashes	>0		Comac moraco		iada rodania	,.		ψ1,000						
Project Co	ost Estimate (attach	detailed conv				Proposad	Year of Const	truction							
r roject Ct	ost Estimate (attach				,	торозец	rear or const	auction							
	Local Match (10%	Federal Funds of Total project cost)	\$900 \$100												
		otal Project Cost	\$1,000	_											
NDDOTO		, , , , , , , , , , , , , , , , , , ,													
NDDOT C	entral Office Only Project Accepted?	Yes No	Ref	erence Number -	II	D Number -									
	Notes								-						
									Page:	4					
									Intersection ID:	834.02 10/28/2013					
									Date:	10/20/2013					

	Y SAFETY IMPR a Department of Trans (06-2011)			P) PRO	JECT APPLIC	CATION					
01 14 00000 ((00 2011)				edestrian and Bio						
			Intersection	ons or				e SE to 1	st St NE	.	
		City of Devils Lake	1			DOT District:					
		Mike Grafsgaard mikeg@dvlnd.com	1		Telep	hone Number:	701-662-76	00 ext 2			
	a location map(s). You			scribe your p	project.						
Location D	Description						CHCD E	h:- A (-h	l. = 4b =4 === .	.	
	Corridor	805.01			•			hasis Area (chec)	
	Street Name							Use of Safety R		Occupants	
	Urban/Rural: County:	Urban Ramsey					Curb Aggres	ver/Older Driver :	Safety		
	Corridor ADT:						Improvemen	ts to Address La			
								mergency Medic rsection Safety	cal Capabilities	to Increase	
						_	improve inte	rocollori Galety			
Doscriba E	North Dakota Crashes Proposed Safety In			5	Years						
Intersection		•	T-#:- C41	Enterting	Development /	Total Ped/Bike	Advanced	Countdown	Curb	Median Refuge	Netes
ID	Street Name	Cross Street	Taffic Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	Notes
801.02	Frontage Rd	5th Ave SE	Thru-STOP	1,270	Yes	1	0	0	0	0	Segment projects suggested on other sheets.
805.01	5th Ave SE	US 2	Signal	8,750	Yes	0	1	1	0	0	Segment projects suggested on other sheets.
		-	-		163						Segment projects suggested on other
802.01	Frontage Rd	Hwy 19 W	Thru-STOP	3,720	-	0	0	0	0	0	sheets. Segment projects suggested on other
805.02	5th Ave SE	5th St SE	Thru-STOP	7,000	-	1	0	0	2	0	sheets.
Describe C	Current Safety Issu	ies & Systemic Ra	nking Review								
		North Dakota Cras	shes, 2008 - 2012	5	years						
		Ir	ntersection Criteria			Description	Ur	nit Cost	Quanity	Total Cost	
	Т	raffic Control Device	Signal			Advanced Walk		per intersection	1	\$0	
	Developm	Entering ADT nent / Ped Generator	>7,500 Yes			untdown Timers Curb Extensions		per intersection per corner	1 2	\$10,000 \$30,000	
		tal Ped/Bike Crashes	>0			an Refuge Island			0	\$0	
										\$40,000	
Project Co	st Estimate (attach	h detailed copy)					Proposed	Year of Cons	struction		
		Fadaral Frada	\$26.000								
	Local Match (10%	Federal Funds of Total project cost)	\$36,000 \$4,000								
		Total Project Cost	\$40,000								
NDDOT C	entral Office Only										
NDDO1 CE	Project Accepted?	☐ Yes ☐ No	Reference	e Number -		ID Number -					
	Notes									_	
										- Page:	1
										Intersection ID: Date:	805.01 10/28/2013
										Dale.	10/20/2013

SFN 59959 (C		sportation Programn									
<u> </u>	00-2011)		11		destrian and Bio	•			- O(NE		
	Contact Name: Email Address:	City of Devils Lake Mike Grafsgaard mikeg@dvlnd.con	e 1		Telep	DOT District: hone Number:	3		n St NE		
Please attach a Location De	a location map(s). Yoเ escription	ı may use additional s	heets to further de	scribe your p	oroject.						
	Corridor Street Name Urban/Rural:	5th Ave SE Urban Ramsey					Reduce Alco Increase the Younger Driv Curb Aggres Improvemen Enhancing E	nasis Area (checi hol Impaired Driv Use of Safety Rever/Older Driver S sive Driving ts to Address Lai imergency Medic rsection Safety	ving estraints for al Safety ne Departure	I Occupants Crashes	
	North Dakota Crashes			5	Years						
Describe Pr Intersection	roposed Safety In	•		Enterting	Development /	Total Ped/Bike	Advanced	Countdown	Curb	Median Refuge	
ID	Street Name	Cross Street	Taffic Control	ADT	Ped Generator	Crashes	Walk	Timers	Extensions	Island	Notes
805.03	6th Ave NE	1st St NE	Thru-STOP	8,303	-	2	0	0	2	0	None
805.04	6th Ave NE	2nd St NE	Thru-STOP	6,488	-	0	0	0	3	1	None
805.05	6th Ave NE	3rd St NE	Thru-STOP	7,828	-	0	0	0	4	2	None
805.06	6th Ave NE	4th St NE	Signal	9,045	Yes	1	1	1	2	0	None
805.07	6th Ave NE	5th St NE	Thru-STOP	6,638	-	0	0	0	4	2	None
805.08	6th Ave NE	6th St NE	Thru-STOP	4,775	-	0	0	0	4	2	None
805.09	6th Ave NE	7th St NE	Thru-STOP	3,588	-	0	0	0	4	2	None
Describe C	urrent Safety Issu	ies & Systemic Ra North Dakota Cra		5	years						
			ntersection Criteria		,	Description	Hn	it Cost	Quanity	Total Cost	
-	Т	raffic Control Device Entering ADT	Signal >7,500	•	Co	Advanced Walk ountdown Timers	\$0	per intersection per intersection	1 1	\$0 \$10,000	
		nent / Ped Generator tal Ped/Bike Crashes	Yes >0			Curb Extensions an Refuge Island	\$15,000 \$10,000	per corner	23 9	\$345,000 \$90,000	
-				•			, ,,,,,,,,			\$445,000	
Project Cos	st Estimate (attacl	h detailed copy)					Proposed	Year of Cons	struction		
	L M-+ (400)	Federal Funds	\$400,500								
-		of Total project cost) Total Project Cost	\$44,500 \$445,000	•							
NDDOT Cer	ntral Office Only										
-	Project Accepted? Notes	☐ Yes ☐ No	Referen	ce Number -		ID Number -				_	
-											2

23 USC 409: NDDOT Reserves All Objections

	Y SAFETY IMPR a Department of Trans 06-2011)			P) PROJ	JECT APPLI	CATION					
	,				edestrian and Bio	•	•				
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816.01	6th St NE	College Dr N	Signal	8,835	-	0	1	1	2	0	sheets. Segment projects suggested on other
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5.0 Behavioral Safety Strategies

5.1 Purpose of Driver Behavior Safety Strategies

North Dakota's Local Road Safety Program (LRSP) recognizes that driver behavior is a significant factor contributing to a majority of the severe crashes on North Dakota's local roads. Traffic crashes may result from any combination of overlapping crash factors, such as the roadway, the vehicle, and driver behavior. Research supports and experts agree that in most cases driver behavior—risky decisions, driver error, lapses of attention, and driver limitations—is a chief factor contributing to traffic crashes (Lerner et al., 2010). Severe traffic crashes in North Dakota's northeast region can be largely prevented and reduced if motorists were persuaded to engage in key safe driving practices to buckle up, drive at safe speeds, pay attention, and plan ahead to avoid impaired driving. For maximum safety benefit, these measures should be undertaken in addition to adopting infrastructure safety strategies to help ensure the safest and most forgiving roadway possible.

5.2 Overview of Behavioral Crash Data for North Dakota's Northeast Region

Unbelted Occupants: Traffic safety research demonstrates that a motorist's seat belt is the most effective defense in the event of a crash. When lap and shoulder seat belts are used, the risk of fatal injury to front-seat passenger car occupants is reduced by 45 percent and the risk of moderate-to-critical injury is reduced by 50 percent (NHTSA, 2001). Safety benefits are even greater for light-truck occupants, with seat belts reducing fatalities by 60 percent and moderate-to-critical injury by 65 percent (NHTSA, 2009). North Dakota's 2013 statewide seat belt use is 77.7 percent; lower than the nationwide use of 86 percent. Unbelted severe crashes are the northeast region's greatest opportunity to strengthen road safety through improving driver behavior. The trend of unbelted severe crashes is increasing statewide. The northeast region mirrors the statewide-unbelted severe crashes with 50 percent of the region's severe crashes involving unbelted motorists.

Alcohol-Related Crashes: Nationally, although impaired driving fatalities have decreased since 2007, the percentage of alcohol-impaired fatalities in the U.S. has remained essentially unchanged (NHTSA, 2012a). Similarly, over the last decade, each year nearly half of motor vehicle fatalities statewide in North Dakota continue to be alcohol-related. In the northeast region, 37 percent of the region's severe crashes are alcohol-related — higher than the statewide 30 percent. From statewide crash data, nearly half of these preventable severe crashes are on the local road system.

Young Driver-Involved: Young drivers have the highest involvement in fatal crashes of any age group. The fatal crash involvement of drivers age 16 to 20 is nearly twice that of drivers age 21 and older (NHTSA, 2012b). Key underlying factors to their high crash risk are the developmental and behavioral issues of adolescence coupled with driving inexperience. Young drivers too often immaturely take risks while driving without thinking through the potential consequences of their life-threatening decisions (Keating, 2007). Such high-risk behaviors

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typically include lack of seat belt use, aggressive driving/speeding, and distractions while driving. Although severe injury crashes involving young drivers have gradually declined statewide, young drivers under the age of 21 continue to be overrepresented in crashes with 67 percent occurring on local roads. In the northeast region, 22 percent of severe crashes involve young drivers, which is similar to the statewide statistics.

Speeding or Aggressive Driving: Speeding is common and is a tough nut to crack nationally and in North Dakota. Although drivers generally acknowledge that speeding is an unsafe behavior, speeding remains common because the perceived risk of injury is low relative to the perceived benefits of driving fast such as saving time and driving pleasure (Lerner et al., 2010). Consequently, the percentage of speeding-related fatal crashes has remained essentially unchanged over the years and remains a contributing factor in 31 percent of traffic fatalities in the U.S. (NHTSA, 2012c). Speeding and aggressive driving continue to account for approximately 27 percent of all severe crashes in North Dakota with 62 percent of these crashes occurring on the local road system. In the northeast region, 30 percent of its severe crashes involve speed or aggressive driving—slightly higher than the statewide percentage.

5.3 Importance of Traffic Safety Culture Change

5.3.1 Influence of Traffic Safety Culture

In adopting North Dakota's long-term vision of zero fatalities, the 2013 North Dakota SHSP establishes a collective goal to reduce the 3-year average of traffic fatalities to 100 or fewer by 2020. To accomplish this interim goal, the northeast region, together with its traffic safety partners, seeks to develop and implement its LRSP safety strategies within the broader societal context of motorists' behavior and North Dakota's traffic safety culture. Traffic safety culture can be defined as the implicit shared values, beliefs, and perceptions that shape motorists' behavior.

5.3.2 Social Norms Inhibiting a Strong Traffic Safety Culture

At the core of the nation's and North Dakota's traffic safety challenge is a complacency toward risk-taking by drivers and a tolerance for traffic crashes and the resulting deaths and serious injuries. Contributing factors include a sense of individual driver invulnerability, perceived driving skills and vehicle control, and a sense of anonymity and entitlement on the road. The latest data from the 2012 Traffic Safety Culture Index Survey reports that, as in previous years, the safety culture in the United States surrounding distracted driving can best be described as "do as I say, not as I do" — due to the high numbers of people who object to certain behaviors, yet will admit that they, themselves, engage in them (AAA, 2012). Real progress in traffic safety depends largely on addressing and changing this culture of indifference to effectively implement and see results of both SHSP and LRSP safety strategies.

5.3.3 Social Levels Influencing Safety Culture

Efforts to change individual driver and motorist behaviors should be planned and executed from an ecological viewpoint—one that examines the driving public and their interaction with their social environments. Traffic safety culture and its influence operate at different levels within society. Therefore, a broader definition of traffic safety culture includes the values, beliefs, and perceptions of not only the individual driver, but of those shared by the various communities of which the driver is a part (Figure 5-1). The individual driver exists within a

system that includes the following levels, each embodying factors that influence driving culture and crash risk (Ward et al., 2010; Dahlberg and Krug, 2002):

- Individual level Factors such as driver age, driving experience, self-esteem, income, and substance abuse
- Relationship level Factors such as relationships with peers, co-workers, supervisors, and family members
- Community level Factors include the settings or environments in which relationships occur such as school, church, workplaces, and neighborhoods
- Societal level Large-scale factors such as safety, health, economic, and educational policies, as well as government commitments and priorities

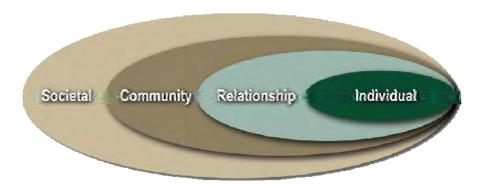


FIGURE 5-1
Social Ecological Perspective of Culture
Source: "Violence – A Global Public Health Problem" by L.L. Dahlberg and E.G. Krug, in *World Report on Violence and Health* (World Health Organization)

Social norms at each level and within each group point to what behaviors are perceived as important. Norms create conformity to expectations that allows people (that is, drivers) to successfully socialize to the subcultures in which they belong. These norms create a climate in which unsafe driving behavior is either encouraged or discouraged. Perceived social norms condoning high-risk driving behaviors provide the case for drivers to rationalize their own high-risk behaviors. To accomplish the culture change, traffic safety behavioral strategies seek to make safe-driving behaviors the accepted norm across all social ecological levels.

The implication of the social ecological model for LRSP efforts is that the implementation plans of LRSP strategies plans should attempt to:

- Increase perceived social pressure to comply with traffic safety laws and practices, thereby, producing safety behavioral norms (Ward et al., 2010)
- Shift the social acceptance of high-risk behaviors to one of perceived unacceptance by significant others and one's peers.

5.4 Behavioral Safety Strategies

5.4.1 Role of Policy, Education, and Enforcement

Techniques or strategies to change driver behavior essentially fall into one of three categories: 1) *policy change* or laws, local ordinances, regulations, sanctions and penalties; 2) *enforcement* of the laws; and 3) *education* or public information, media, and training. These three categories of behavioral safety strategies work together to have the greatest impact on changing risky driver behavior. The degree of effectiveness of any one strategy on behavioral change depends not only on how effectively the strategy is implemented, but also on how these three categories of policy, enforcement, and education are working together.

For example, a state or local agency that is seeking to increase motorists' seat belt use and decides to use a "buckle up" public information campaign (behavioral change strategy). The effectiveness of the campaign not only depends on the quality of the education or public information campaign (relevance to target group, duration, saturation of the messaging), but also the strength of the law in place (primary vs. secondary seat belt law, all passengers vs. front seat only, higher penalty/fee vs. low penalty/fee) and, most important, the degree of seat belt use enforcement (coverage, intensity, visible by the public).

Consequently, the strength of driver safety policy, enforcement, and education surrounding a behavioral strategy selected greatly impact its effectiveness. Therefore, when selecting and implementing a behavioral strategy, an agency must examine the policy, enforcement, and educational context of the strategy and explore ways to strengthen each, as appropriate, to gain the most from a selected strategy.

Finally, it is critically important that traffic safety enforcement be viewed as a priority within local law enforcement agencies and that agency leaders and administrators advocate for strong local enforcement of traffic laws. It is imperative that agency leaders actively address political and public resistance and provide a pathway to deploy the leading strategy to save lives on North Dakota roadways—effective traffic enforcement coupled with public outreach. By advocating for enforcement, educating local elected officials, and equipping officers to effectively enforce traffic safety laws, North Dakota will reap far greater life-saving outcomes from its local safety initiatives.

5.4.2 Effective Use of Public Information Strategies

Public information (education) strategies are often popular among communities seeking to change risky driving behaviors. Education or public information campaigns can range from brochures and mailings to peer-to-peer safety messaging. Brochures and mailings are a passive approach, while peer-to-peer messaging provides a more effective behavioral change approach. In general, a key challenge in influencing driver behavior is that most drivers know what they are supposed to do to drive safely, yet due to successfully driving with risky patterns with no incidence of crash, drivers underestimate the risk of their choices. For this reason, research supports that education, coupled with enforcement, will have the strongest impact in changing driver behavior (NHTSA, 2013).

Following are key characteristics of impactful public information/education campaigns (Williams, 2007):

Implemented in support of a high-visibility enforcement program

- Focused messaging for a target group
- Longer-term programs delivering messages of sufficient intensity over time
- Messages communicating new information not previously well known
- Messages that are part of a broader-based, longer-term community program with similar messaging coming from multiple sources
- Using behavior change models including interactive methods teaching skills to resist social pressure (such as role playing, group discussion)

5.4.3 LRSP Phase 1 Priority Strategies

During the LRSP workshop, participants reviewed the northeast region's behavioral crash data and discussed behavioral safety strategy alternatives that could be implemented at the local level. Out of the strategy review discussions, participants engaged in a prioritization process with six strategies emerging as the preferred local behavioral safety strategies for the four behavioral critical emphasis areas. Table 5-1 reflects the LRSP Phase 1 results of the strategy prioritization, as well as each strategy's alignment with the North Dakota SHSP (indicated by an "X" if included in the SHSP).

TABLE 5-1
North Dakota Phase 1 LRSP Workshop Priority Behavioral Strategies and Relationship with the North Dakota SHSP

Phase 1 LRSP Workshop Priority Behavioral Strategies and Their Relationship with the North Dakota SHSP Impaired Driving	Northeast Region	Region 10 (Burleigh County)	Region 14 (Ward County)	ND SHSP
Conduct regular high-visibility DUI enforcement saturations	Х	Х	Х	Х
Speeding and Aggressive Driving				
Conduct high-visibility targeted enforcement of speeding and aggressive driving Note: Additional speeding and aggressive driving enforcement strategies to support priority infrastructure safety strategies include: Provide enhanced enforcement to support local agency implementation of red-light-running confirmation lights for at-risk intersection locations Provide enhanced enforcement on local, at-risk locations for lane departure	х	х	х	x
Young Drivers				
Publicize and conduct a high-visibility enforcement of GDL restrictions, cell and texting laws, underage drinking and driving, and seatbelt laws			х	Х
Encourage driver education providers (local schools and private providers) to require parent education component	X	х		Х
Brief interventions by health care providers following a crash regarding driving risks and consequences			X	Х
Unbelted Occupants				
Conduct highly publicized enforcement campaigns to maximize restraint use.	Х	х	Х	Х
Note: DUI = driving under the influence GDL = graduated drivers license				

The following subsections provide a more complete description of each priority strategy, suggested steps to launch local agency efforts, recommended implementation resources, and potential future considerations for expanded local agency and community-based support for the SHSP safety strategies. It is important to note that multidisciplinary SHSP implementation teams will be formed to support the implementation of priority strategies for each of the six SHSP priority emphasis areas: lane-departure, unbelted occupants, alcohol-related, speeding or aggressive driving, young drivers, and intersections. Therefore, local agencies seeking to leverage local-level safety initiatives described in the following subsections are encouraged to coordinate with and/or engage in the statewide SHSP implementation teams.

5.4.4 Impaired Driving

Northeast Region Priority Strategy – Conduct regular high-visibility DUI enforcement saturation patrols (includes expanding DUI sobriety checkpoints)

Description: High-visibility DUI enforcement is a high-priority, proven safety strategy to reduce alcohol-impaired severe crashes in North Dakota and across the nation. The most effective way to deter impaired driving is through a highly visible enforcement effort to reinforce the driving public's belief that impaired drivers are at high risk of being arrested, prosecuted, and adjudicated. High-visibility enforcement consists of multiple jurisdictions and/or multiple squads patrolling a segment of roadway at the same time, often using brightly colored vests and signs. Planned enforcement is publicized extensively through community kickoff events involving the local media and public education campaigns about the enforcement. High visibility also includes enforcement agencies reporting to news media the outcome or arrests made during the saturation or checkpoint campaign. In addition to deterring driving after drinking by increasing the perceived risk of arrest, high-visibility enforcement extends the safety impact of the enforcement campaign for a longer period following the campaign.

What are saturation patrols?

Saturation patrols, also known as "dedicated DUI patrols," are stepped-up enforcement involving a greater number of law enforcement officers patrolling a specific area for a set time to identify and arrest impaired drivers. Multiple agencies often combine and concentrate their resources to conduct saturation patrols.

What are sobriety checkpoints?

At sobriety checkpoints, law enforcement officials evaluate drivers for signs of alcohol or drug impairment at certain points on the roadway. Vehicles are stopped in a specific sequence, such as every other vehicle or every fourth, fifth, etc. The frequency of which vehicles are stopped depends on the traffic conditions and the number of enforcement personnel available to staff the checkpoint.

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas, such as impaired driving, in the SHSP.
- Assist local law enforcement agencies and Regional DUI Task Forces with identifying locations with high crash involvement for high-visibility enforcement.

- With local law enforcement, attend county board/city council meetings to speak on the importance of reducing impaired driving and the important role of both enforcement and engineering safety strategies.
- Collaborate with highway patrol, local law enforcement, community health officials, and local traffic safety stakeholders to use TSO DUI campaign materials to conduct community outreach on the enforcement campaign.

Implementation Resources:

- For crash data and analysis to focus DUI enforcement efforts, contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.
- To learn about local traffic safety enforcement activities and enforcement grant opportunities, contact the TSO.
- See Section 5.5, Traffic Safety Office Supporting Resources.
- For statewide impaired-driving enforcement mobilizations, the TSO distributes media outreach materials to local enforcement agencies, which may include press releases, talking points, camera-ready artwork and posters, impaired driving fact sheets, handouts for the public at checkpoints, a print public service announcement (PSA), and live-read radio PSAs. (Note: TSO to assemble available information resources.)
- For guidance on planning and publicizing saturation patrols and sobriety checkpoints:
 - Saturation Patrols & Sobriety Checkpoints: A How-to Guide for Planning and Publicizing Impaired Driving Enforcement Efforts, NHTSA, Report No. DOT HS 809 063, revised October 2002.
 - http://www.nhtsa.gov/people/injury/alcohol/saturation_patrols/
 - Low-Staffing Sobriety Checkpoints. NHTSA, Report No. DOT HS 810 590, 2006.
 http://www.nhtsa.gov/people/injury/enforce/LowStaffing_Checkpoints/
- Other impaired-driving safety resources:
 - National Highway Traffic Safety Administration: http://www.nhtsa.gov/Impaired
 - Governor's Highway Safety Administration:
 http://www.ghsa.org/html/issues/impaireddriving/index.html
 - Insurance Institute for Highway Safety:
 http://www.iihs.org/research/topics/alcohol_drugs.html

Potential future considerations for expanded local agency and community-based support of SHSP impaired-driving safety strategies:

- Engage local safety stakeholders (law enforcement, Mothers Against Drunk Driving
 [MADD], Students Against Drunk Driving [SADD], North Dakota Safety Council,
 community health provider, emergency medical service providers) and facilitate coalition
 development to educate local elected officials on the importance of state agency impaireddriving legislative initiatives resulting from the state's comprehensive assessment of North
 Dakota impaired-driving laws.
- Conduct community-wide and sustained public information outreach to educate and create cultural awareness of the risks associated with excessive alcohol use.

- Develop and conduct local public outreach on accessible safe-ride alternative transportation services.
- Conduct highly publicized compliance checks and training for local alcohol retailers and merchants to reduce sales to underage persons.

Other high-impact, proven strategies for local agency consideration:

• Monitor judicial sentencing of local DUI courts or intensive supervision programs.

5.4.5 Young Drivers

Northeast Region Priority Strategy – Encourage driver education providers (local schools and private providers) to require a parent education component

Description: Effective parental monitoring of teen driving can go a long way in helping to keep novice drivers safe on the roadway. Programs offering teen driver safety materials together with facilitated guidance help parents make the important connection between teen driving restrictions and teen driving risks. Without a required parent component for teen driver education, parents lack awareness of graduated drivers license (GDL) safety provisions, don't fully recognize teen driving risks, are often anxious to be relieved of shuttling their teens, may be reluctant to invest the necessary time to instruct and supervise their teen's driving, and often believe their teen is the exception and is a good and safe driver. To help overcome these parent challenges and more effectively engage parents, incorporating a parent education component into driver education programs is demonstrating promising results.

Key components of a good parent education program include:

- Discusses risks for novice teen drivers
- Explains how and why GDL works to address risks
- Reviews the critical role parents play in teaching, supporting and managing their novice drivers
- Explains the importance of and provides an opportunity to try out a parent/teen driving agreement
- Delivery by trained, educated facilitators
- Emphasizes parents and teens working together for safety

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas, such as young drivers, in the SHSP.
- Learn about education providers in your local community by contacting the Traffic Safety Office at (701) 328-4692.
- Explore county-mandated parent training through examining Virginia's Planning District 8 (includes four counties and four cities) 90-minute driving safety program for parents and teens as part of the in-classroom portion of the state's driver education curriculum. Contact Ben Swecker (703) 791-7328 or Tim TeWalt (703) 791-7353 at Prince William County Schools.

- With local law enforcement and driver educators, attend county board/city council
 meetings to inform them of the local initiative to incorporate parent education into driver's
 education programs to more fully engage parents and reduce teen driver severe crashes.
- Post information on teen driving laws on local school websites or request school resource
 officer to send information to parents highlighting driving risks for teens and existing North
 Dakota teen driver laws.
- Consider linking parent-teen participation in a teen driving program to school parking privileges.

Implementation Resources:

- See Section 5.5, Traffic Safety Office Supporting Resources.
- For educational materials for parents of teen drivers including guidelines to ensure teen
 drivers are educated on safe driving practices as well as *The North Dakota Parent Guide to Teen Driving* and the *Parent Teen Driver Agreement*, see the Teen Drivers & Parents section of
 the NDDOT website:
 http://www.dot.nd.gov/divisions/safety/teens-parents.htm
- For an example parent-teen class outline and discussion guide, download the Minnesota
 Department of Public Safety, Office of Traffic Safety's *Teen Drivers: The Parent's Role* at:
 https://dps.mn.gov/divisions/ots/teen-driving/Documents/Parent-class-leaders-guide-july-2013.doc
- The Minnesota Office of Traffic Safety developed "Point of Impact: Teen Driver Safety Parent Awareness Program" as a community-based class for parents and their soon-to-be teen drivers. The Point of Impact Leader's Guide is a resource for implementing the class. The Point of Impact video is an important component of the program. A PowerPoint presentation and other information are available by contacting Gordy Pehrson at gordy.pehrson@state.mn.us.
- For information on the nationally recognized University of Michigan's Checkpoints program
 offering facilitated parent education:
 http://youngdriverparenting.org/ and http://www.saferdrivingforteens.org/
- For a comprehensive guide to strengthen parental roles in teen safe driving, see the Governors Highway Safety Association's (GHSA's) *Promoting Parent Involvement in Teen Driving: An In-Depth Look at the Importance and the Initiatives.*http://www.ghsa.org/html/publications/pdf/sfteens13.pdf
- For additional information on mandated and voluntary parent/teen education programs in Connecticut, Massachusetts, Georgia, and select Virginia counties, see GHSA's Curbing Teen Driver Crashes: An In-Depth Look at State Initiatives.
 http://www.ghsa.org/html/publications/pdf/sfteens12.pdf
- For age-specific information and resources for parents on how to start and continue the
 conversation about alcohol use with their children, see the North Dakota's *Parents LEAD*program (Listen, Educate, Ask, Discuss).
 http://www.parentslead.org/

Considerations for future expanded local agency/community support of ND SHSP young driver safety strategies:

 Engage local traffic safety stakeholders (law enforcement, school administrators, driving schools, insurance companies, community health providers, emergency medical service providers) and facilitate coalition development to educate local elected officials on the importance of state agency GDL and teen driver safety policy initiatives.

Other high-impact, proven strategies for local agency consideration:

 Conduct locally facilitated peer-to-peer driver safety outreach campaigns designed for high school students to raise peer awareness of the common risk factors threatening novice drivers.

5.4.6 Unbelted Occupants

Northeast Region Priority Strategy – Conduct highly publicized enforcement campaigns to maximize restraint use

Description: See Section 5.4.4 for a description of high-visibility/highly publicized enforcement campaigns.

North Dakota law enforcement agencies (state, county, city, and tribal) participate in the state's *Click It or Ticket* mobilization program to boost seat belt use and reduce highway fatalities through stepped up enforcement of unrestrained occupants, The mobilization is supported by national and local paid advertising and earned media campaigns aimed at raising awareness before the enforcement saturation. *Click It or Ticket* takes place each year in May around the Memorial Day holiday. North Dakota has increased its focus on nighttime seat belt use because fewer motorists buckle up at night.

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas, such as lack of seat belt use, in the SHSP.
- Assist local law enforcement agencies with identifying locations with high, unbelted crash involvement for high-visibility enforcement.
- With local law enforcement, attend county board/city council meetings to speak on the importance of enforcing seat belt use.
- Collaborate with highway patrol, local law enforcement, community health officials, and local traffic safety stakeholders to use TSO belt use campaign materials to conduct community outreach on the enforcement campaign.

Implementation Resources:

- For crash data and analysis to focus seat belt enforcement efforts, contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.
- To learn about local traffic safety enforcement activities and enforcement grant opportunities, contact the TSO.
- See Section 5.5, Traffic Safety Office Supporting Resources.
- For statewide belt use mobilizations, the TSO distributes media outreach materials to local enforcement agencies, which may include press releases, talking points, camera-ready

artwork and posters, seat-belt-use fact sheets, a print public service announcement (PSA), and live-read radio PSAs. (*Note: TSO to assemble available information resources.*)

- For guidance on planning and publicizing belt-use saturation patrols:
 - NHTSA 2013 national seat belt enforcement *Products for Enforcement Action Kit (PEAK)* to help enforcement rally officers and alert the public to prepare for maximum highvisibility seat belt enforcement during the day and at night. http://www.trafficsafetymarketing.gov/CIOT-PEAK
 - Nighttime Enforcement of Seat Belt Laws: An Evaluation of Three Community Programs, NHTSA, Report No. DOT HS 811 189, August 2009.
 - Innovative Seat Belt Demonstration Programs in Kentucky, Mississippi, North Dakota, and Wyoming, NHTSA, Report No. DOT HS 811 080, March 2009.
 - Avoiding "Tween" Tragedies: Demonstration Project to Increase Seat Belt Use Among 8- to 15-year-old Motor Vehicle Occupants, NHTSA, Report No. DOT HS 811 096, June 2012.
 - For these and other belt enforcement and information outreach resources: http://www.nhtsa.gov/Driving+Safety/Occupant+Protection
- Other seat-belt safety resources:
 - Governor's Highway Safety Administration:
 http://www.ghsa.org/html/issues/occprotection/index.html
 - Insurance Institute for Highway Safety:
 http://www.iihs.org/iihs/topics/t/safety-belts/topicoverview

Potential future considerations for expanded local agency, tribal and community-based support of SHSP safety strategies:

- Pursue tribal ordinances for primary enforcement of seat belt laws.
- Engage local safety stakeholders (law enforcement, Mothers Against Drunk Driving [MADD], Students Against Drunk Driving [SADD], North Dakota Safety Council, community health provider, emergency medical service providers) and facilitate coalition development to educate local elected officials on the importance of state agency primary seat belt legislative initiatives.
- Conduct community-wide and sustained public information outreach to educate and create cultural awareness of the risks associated with unbelted motorists.

5.4.7 Speeding and Aggressive Driving

Northeast Region Priority Strategy – Conduct highly publicized, targeted enforcement campaigns of speeding and aggressive driving

Description: See Section 5.4.4 for a description of high-visibility/highly publicized enforcement campaigns.

North Dakota law enforcement agencies (state, county, city, and tribal) participate in the state's Ticketing Aggressive Cars and Trucks (TACT) program to reduce speed-related fatalities and severe injuries through stepped up enforcement of aggressive cars and trucks primarily in oil-impacted counties. For aggressive driving enforcement, officers focus on drivers who commit a

combination of moving traffic violations such as speeding, following too closely, and/or running red lights, which endanger other persons or property.

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas, such as speeding, in the SHSP.
- Assist local law enforcement agencies with identifying locations with high-speed- and aggressive-driving-related crash involvement for high-visibility enforcement.
- With local law enforcement, attend county board/city council meetings to speak on the importance of enforcing the speed limit and deterring aggressive driving.
- Collaborate with highway patrol, local law enforcement, community health officials, and local traffic safety stakeholders to use TSO speed campaign materials to conduct community outreach on the enforcement campaign.

Implementation Resources:

- For crash data and analysis to focus speed enforcement efforts, contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.
- To learn about local traffic safety enforcement activities and enforcement grant opportunities, contact the TSO.
- See Section 5.5, Traffic Safety Office Supporting Resources.
- For guidance on planning and publicizing speed saturation patrols and successful case examples, see NHTSA's *Guidelines for Developing a Municipal Speed Enforcement Program* at: http://www.nhtsa.dot.gov/people/injury/enforce/program.htm
- For a summary of successful aggressive driving enforcement programs deployed at the local and state-level across the country, see NHTSA's (2001b) *Aggressive Driving Enforcement: Strategies for Implementing Best Practices* at: http://www.nhtsa.gov/people/injury/enforce/aggressdrivers/aggenforce/
- Other speed-related safety resources:
 - Governor's Highway Safety Administration: http://www.ghsa.org/html/issues/speeding.html
 - Insurance Institute for Highway Safety:
 http://www.iihs.org/iihs/topics/t/speed/topicoverview

Potential future considerations for expanded local agency, tribal, and community-based support of SHSP safety strategies:

Engage local safety stakeholders (law enforcement, Mothers Against Drunk Driving
[MADD], Students Against Drunk Driving [SADD], North Dakota Safety Council,
community health provider, emergency medical service providers) and facilitate coalition
development to educate local elected officials on the importance of state agency legislative
initiatives to strengthen penalties such as increased fines for right-of-way and speed
violations.

Northeast Region Priority Strategy – Provide enhanced enforcement to support local agency implementation of red-light-running confirmation lights for at-risk intersection locations. (*Note: Use HSIP flex funds for overtime enforcement*)

Description: To reduce the most common type of severe crashes at signalized intersections — right-angle crashes—the northeast region is deploying an innovative safety strategy using a downstream confirmation light system to reduce red-light running. A blue LED light mounted on the back of a traffic light is activated when an offender runs the red light. A single officer stationed across the intersection downstream from the traffic light safely observes and pursues the red light violator (instead of one officer to observe and an additional officer to pursue). To implement, red-light-running confirmation lights require interdependent collaboration of both engineering and enforcement; even more effective would be added public outreach about the red-light-running confirmation lights.

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas, such as speeding and aggressive driving, in the SHSP.
- Work with NDDOT staff regarding specific design features of the system. Contact NDDOT Traffic Operations Section, Shawn Kuntz, (701) 328-2673.
- Coordinate with local law enforcement:
 - Ask for their assistance in locating the enforcement lights on traffic signal poles/mast arms (optimum viewing locations)
 - Ask for an agreement regarding minimum levels of enforcement (that is, 1 hour per day at any of the equipped locations)
 - Provide training to officers after installation demonstrate that the "blue/confirmation" light does come on at the same instant as the red light of the signal
- Encourage law enforcement to coordinate with the city/county attorney make sure the attorney understands the technology and is willing to prosecute the violators.
- Encourage the city/county attorney to coordinate with the district court judge make sure
 the judge understands the technology and will uphold charges and support the conviction
 of violators.
- Prior to issuing any tickets for violations using the confirmation lights, have the traffic
 signal operations engineer check all of the signals clearance intervals (yellow + all red) to
 make sure they are 100-percent consistent with the agencies adopted guidelines. Have a
 note confirming compliance signed by the engineer put in the signal controller cabinet. (This
 will help address the inevitable complaint by those issued tickets that the agency changed
 the clearance intervals to generate more violators and increase revenue streams.)
- With local law enforcement, attend county board/city council meetings to speak on the community safety benefits of red-light-running confirmation lights.

Implementation Resources:

• For crash data and analysis to focus red-light-running enforcement efforts, contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.

- See Section 5.5, Traffic Safety Office Supporting Resources.
- Safety project developed as part of the LRSP are eligible for funding through the state's Highway Safety Improvement Program (HSIP) including enhanced enforcement.
- Contact local agencies that have deployed red-light-running confirmation lights:
 - City of Burnsville Public Works, Minnesota

Engineering Department

100 Civic Center Parkway

Burnsville, MN 55337

Phone: (952) 895-4534

- Richardson Police Department, Texas

140 North Greenville Ave.

Richardson, TX 75081

Phone: (972) 744-4800

Northeast Region Priority Strategy – Provide enhanced enforcement on local, at-risk locations for lane departure.

Description: To reduce lane-departure severe crashes on rural paved roads, the northeast region will be deploying infrastructure safety improvements (for example, centerline rumble strips, edge line rumble strips, adding or widening edge lines, high-visibility pavement markings) along select at-risk corridors. To maximize the expected safety benefit of the road improvements, integrating increased enforcement presence at targeted at-risk locations and timeframes will reduce risky driver behaviors through strengthening the public's perceived risk of being stopped.

Getting Started:

- Contact the Traffic Safety Office (TSO) to participate in the SHSP process as a stakeholder in the implementation of strategies identified for priority safety emphasis areas, such as lane departure, in the SHSP.
- Work with NDDOT staff regarding specific design features of the system. Contact NDDOT Traffic Operations Section, Shawn Kuntz, (701) 328-2673.
- Coordinate with local law enforcement to provide enforcement at local, at-risk locations for lane departure:
 - Based on crash data, identify timeframes for high crash risk (such as Saturday evening hours)
 - Ask for an agreement regarding minimum levels of enforcement (that is, 1 hour per day at any of the equipped locations, target contacts per hour, etc.)

Implementation Resources:

- For crash data and analysis to focus red-light-running enforcement efforts, contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.
- See Section 5.5, Traffic Safety Office Supporting Resources.

- Safety project developed as part of the LRSP are eligible for funding through the state's Highway Safety Improvement Program (HSIP) including enhanced enforcement.
- See Section 5.4.7 for speeding and aggressive driving resources

5.5 Traffic Safety Office Supporting Resources

Unless otherwise indicated, for technical assistance and supporting resources contact the NDDOT Traffic Safety Office (TSO) at (701) 328-4692.

5.5.1 TSO Grant Program Application Process

The TSO solicits grant applications from eligible state and local agencies and for-profit and nonprofit organizations that address North Dakota's problem solution plans (PSPs). PSPs reflect the state's greatest opportunities for behavioral safety improvement. Grant applications are due June 30 of each year and are evaluated based on: (1) response to identified problems, (2) proposed evidenced-based strategy, (3) clear objectives, (4) comprehensive evaluation plans, and (5) cost-effective budgets. Selected projects are included in TSO's Highway Safety Plan and once approved by NHTSA, grant contracts are generally effective October 1 through September 30.

5.5.2 Technical Assistance

County Outreach Program

The TSO, in cooperation with the North Dakota Association of Counties, offers a county-based Traffic Safety Outreach program to provide advocacy and community mobilization, media support, public outreach, and training to address seat belt use, impaired driving, speeding, and distracted driving at the county level. County participants include law enforcement, transportation engineering, social services, public health, businesses, nonprofit agencies, faith-based agencies, media, and other entities.

5.5.3 Traffic Records/Crash Data

Traffic and Criminal Software (TraCS)

The quality of traffic-safety problem identification and decision making regarding effective safety strategies and their implementation is based on the quality and timeliness of crash data. Data is collected from officer crash reports at the time of the incident when a crash involves fatalities, injuries, or at least \$1,000 in property damage. NDDOT reviews the crash report and enters the data into a centralized database called the Crash Reporting System (CRS).

To assist law enforcement in providing timely, complete, and accurate crash reports, the NDDOT Traffic Safety Office (TSO) supports the installation of Traffic and Criminal Software (TraCS) and provides technical assistance and training to local agency and tribal law enforcement to effectively deploy TraCS for in-the-field incident reporting. Local and tribal enforcement agencies are strongly encouraged to utilize the convenience of TraCS for the electronic submission of crash reports to the NDDOT. Key benefits to participating agencies and tribes are the reduced officer time and effort required for duplicate entry into local and state crash databases, reduced need for data entry resources and administrative support, as well as improving the overall quality and timeliness of the crash report.

Local Agency Crash Data Support

The Upper Great Plains Transportation Institute develops crash data summaries for each law enforcement agency under contract with the TSO for overtime enforcement supporting impaired driving and seat belt enforcement campaigns. The crash data summaries demonstrate the priority crash factors and trends within each local agency's jurisdiction.

Annual Crash Summary

The NDDOT annually publishes the Crash Summary to identify and describe the annual crash data and historical crash trends in North Dakota including the description of factors contributing to the occurrence of traffic crashes and the resulting injuries and fatalities. The Crash Summary is a valuable reference resource for local agencies and their safety partners for problem identification, safety strategy planning, targeted strategy implementation, program evaluation, and media inquiries.

http://www.dot.nd.gov/divisions/safety/docs/crash-summary.pdf

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